Med
S.

SAINT
THOMAS'S HOSPITAL
REPORTS.

EDITED BY

DR. M. A. CASSIDY, MR. J. E. ADAMS AND
DR. J. P. HEDLEY.

VOL. XLV.

188295
12.3.24

LONDON
PRINTED BY
ADLARD & SON & WEST NEWMAN, LIMITED
23, BARTHOLOMEW CLOSE, E.C.
PUBLISHED AT THE HOSPITAL

MDCCCCXXIII

ADLARD AND SON AND WEST NEWMAN, LTD., IMPR., LONDON AND DORKING.

CONTENTS.

PAGE

I. Combined Medical, Surgical, and Gynæcological Report, 1921. By J. Forest-Smith, M.R.C.S., L.R.C.P.; P. H. Mitchiner, M.D., M.S.Lond., F.R.C.S.Eng.; and A. H. Richardson, M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng. . . . 1

II. Combined Operation Table, 1921. By P. H. Mitchiner, M.D., M.S.Lond., F.R.C.S.Eng., and A. H. Richardson, M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng. 71

III. An Inquiry into the Results of the Operative Treatment of Internal Derangement of the Knee-joint (1912–1921). By Philip H. Mitchiner, M.D., M.S.Lond., F.R.C.S.Eng. 91

IV. Report of Mary Ward: With Special Tables of Placenta Prævia, Eclampsia, and Albuminuria of Pregnancy. By A. H. Richardson, M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng. 99

V. Report of the Out-Patient Obstetrical Department for 1921. By James M. Wyatt, M.B., B.S.Lond., F.R.C.S.Eng. 107

VI. Report of the Ante-Natal Department. By James M. Wyatt, M.B., B.S.Lond., F.R.C.S.Eng. . . 109

VII. The Children's Department (Medical), 1921. By R. C. Jewesbury, M.A., M.D., B.Ch.Oxon., F.R.C.P. 111

VIII. Statistical Report of the Ophthalmic Department, 1921. By P. G. Doyne, M.B., B.Ch.Oxon., F.R.C.S.Eng. 113

PAGE
IX. Report of the Dermatological Department. By S. E. Dore, M.A., M.D.Cantab., F.R.C.P. . . . 119
X. Report of the Ear Department for the Year 1921. By H. J. Marriage, M.B., B.S.Lond., F.R.C.S.Eng. 125
XI. Report for 1921 from the Clinical and Pathological Laboratories. By L. S. Dudgeon, C.M.G., C.B.E., F.R.C.P. 129
XII. Report of the X Ray Department, 1921. By Sir Archibald Reid, K.B.E., C.M.G. . . . 131
XIII. Report of the Physico-Therapeutic Department (Section A), 1921. By Richard Timberg, M.R.C.S.Eng., L.R.C.P.Lond., G.D.Stockholm . 133
XIV. Report of the Physico-Therapeutic Department (Section B), 1921. By James Mennell, M.A., M.D., B.Ch.Cantab. 139
XV. Report of the Physico-Therapeutic Department (Section C), 1921. By G. Murray Levick, M.R.C.S., L.R.C.P. 145
XVI. Report of the Orthopædic Department, 1921. By W. Rowley Bristow, M.B., B.S.Lond., F.R.C.S.Eng. 153
XVII. Statistical Report of the Tuberculosis Department, 1921. By G. T. Hebert, M.A., M.D., B.Ch.Oxon., M.R.C.P. 155
XVIII. Report of the Venereal Department, 1921. By L. W. Harrison, D.S.O., M.B., Ch.B.Glas. 159
XIX. Report of the Cardiographic Department, 1921. By M. A. Cassidy, M.A., M.D.Cantab., F.R.C.P. . 161
XX. Report of the Nose and Throat Department, 1921. By Walter G. Howarth, M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng. 163

LIST OF SUBSCRIBERS.

Abbott, F. C., C.B.E., B.Sc., M.B., M.S.Lond., F.R.C.S.Eng., The Hermitage, White Hill, Bletchingley
Ackerley, R., M.A., M.B., B.Ch.Oxon., Quisisana, Llandrindod Wells, Radnorshire
Acland, T. D., M.A., M.D.Oxon., F.R.C.P., 19, Bryanston Square, W. 1
Adams, J. E., M.S.Lond., F.R.C.S.Eng., 19, Harley Street, W. 1
Andrew, Henry, 29, Southernhay West, Exeter

Ballance, Sir Charles A., K.C.M.G., C.B., M.V.O., M.S.Lond., F.R.C.S.Eng., 106, Harley Street, Cavendish Square, W. 1
Bamforth, J., M.D., Ch.B., D.P.H.Liverp.
Banks, Alfred, F.R.C.S., "St. Nicholas," Sutton
Battle, W. H., F.R.C.S.Eng., 49, Harley Street, Cavendish Square, W. 1
Beale, H. R., M.D.Lond., Bridegate House, Retford, Notts
Bernau, H. F., O.B.E., Napier, Hawkes Bay, New Zealand
Beville, F. W., 2, Brock Street, Bath.
Birley, J. L., C.B.E., M.A., M.D., B.Ch.Oxon., F.R.C.P., 10, Upper Wimpole Street, W. 1
Bond, W. A., M.A., M.D.Cantab., D.P.H.Cantab., 9, Russell Mansions, 144, Southampton Row, W.C. 1
Bott, W. Gibson, J.P., 14 Portsdown Avenue, Finchley, N.W. 11
Box, C. R., B.Sc., M.D.Lond., F.R.C.P., F.R.C.S.Eng., 1, Harley House, N.W. 1
Boycott, A. N., M.D.Lond., Herts County Asylum, Hill End, St. Albans
Bristow, W. Rowley, M.B., B.S.Lond., F.R.C.S.Eng., 102, Harley Street, W. 1
Brook, W. F., F.R.C.S.Eng., Longlands House, Swansea
Brown, Fred. Gordon, Chigwell, Essex
Bruce, R. M., Western Hospital, Seagrave Road, Fulham, S.W. 6
Buzzard, E. F., M.A., M.D., B.Ch.Oxon., F.R.C.P., 78, Wimpole Street, W. 1

Caiger, F. Foord. M.D.Lond., F.R.C.P., D.P.H.Cantab., South-Western Fever Hospital, Stockwell, S.W. 9
Cassidy, M. A., M.A., M.D., B.C.Cantab., F.R.C.P., 42, Montagu Square, W. 1

Colman, W. S., M.D.Lond., F.R.C.P., "Mavins," Farnham, Surrey
Cope, A. E., M.B.Lond., M.D.Durh., 66, Belgrave Road, S.W. 1
Corner, E. M., M.A., M.B., M.Ch.Cantab., B.Sc.Lond., F.R.C.S. Eng., Woodlands Park, Gt. Missenden, Bucks

Davies, T. Anwyl. M.B., B.S.Lond., 19, Grosvenor Street, Grosvenor Square, W. 1
Dore, S. E., M.A., M.D.Cantab., F.R.C.P., 8, Harley Street, W. 1
Doyne, P. G., B.A., M.B., B.Ch.Oxon., F.R.C.S.Eng., 8, Harley Street, W. 1
Dudgeon, Prof. L. S., C.M.G., C.B.E., F.R.C.P.Lond., 6, Stanhope Street, W. 2
Dunkley, E. V., M.D., B.S.Lond., 38, Onslow Square, S. Kensington, S.W. 7
Dyke, S. C., B.A., M.B., B.Ch., D.P.H.Oxon., M.R.C.P., 23, Rugby Mansions, Kensington, W. 14

Evelyn, W. A., M.A., M.D.Cantab., 33, Bootham, York

Fairbairn, J. S., M.A., M.B., B.Ch.Oxon., F.R.C.P., F.R.C.S.Eng., 42, Wimpole Street, W. 1
Fawssett, Frank, M.B.E., M.B., B.S.Lond., 83, High Street, Lewes
Fildes, G., M.B., Ch.B.Manch., "Tealby," Warboise Road, Kingston Hill, Surrey
Fisher, J. H., M.B., B.S.Lond., F.R.C.S.Eng., 83, Wimpole Street, W. 1

Gates, E. A., O.B.E., M.D.Lond., 5, Burwood Place, Hyde Park, W.
Gervis, Henry, M.D., F.R.C.P., J.P., 15, Royal Crescent, Bath
Gouldesbrough, C., M.A., M.B., B.Ch.Oxon., 56, Welbeck Street, W. 1

Hall, J. B., M.A., M.B., M.C.Cantab., F.R.C.S.Eng., Eldon Place, Bradford, Yorks
Halliwell, A. C., B.A., M.B., B.Ch.Cantab., F.R.C.S.Eng.
Harrison, Col. L. W., D.S.O., M.B., Ch.B.Glasg., 68, Eccleston Square, S.W. 1
Haslam, W. F., F.R.C.S.Eng., 8, Vicarage Road, Edgbaston, Birmingham
Hawkins, H. P., C.B.E., M.A., M.D.Oxon., F.R.C.P., Lackenhurst, Shipley, Sussex
Haydon, T. H., B.A., M.B., B.C.Cantab., Marlborough, Wilts
Hebert, G. T., B.A., M.D.Oxon., M.R.C.P., 18, Big Wood Road, Hampstead, N.W. 11
Hedley, E. W., M.B.E., M.A., M.D., B.Ch.Cantab., 10, Pont Street, S.W. 1
Hedley, J. P., M.A., M.B., M.Ch.Cantab., F.R.C.S.Eng., F.R.C.P., 65, Harley Street, W. 1

HINNELL, J. SQUIER, O.B.E., B.A., M.D.Cantab., 62, Garland Street, Bury St. Edmunds
HOBHOUSE, E., M.A., M.D., B.Ch.Oxon., F.R.C.P., 20, Brechin Place, S.W. 7
HOWARTH, W. G., M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng., 21, Devonshire Place, W. 1
HUDSON, A. C., M.A., M.D., B.Ch.Cantab., F.R.C.S.Eng., 50, Queen Anne Street, W. 1

JEWESBURY, R. C., M.A., M.D., B.Ch.Oxon., F.R.C.P., 5, Wimpole Street, W. 1
JONES, EVAN, J.P., 39, Hyde Park Gate, S.W. 7
JONES, Sir ROBERT, K.B.E., C.B., F.R.C.S., 11, Nelson Street, Liverpool, and 116, Park Street, W. 1
JONES, ISAAC, M.D., B.S.Melb., 225, Ashley Gardens, S.W. 1

LAWFORD, J. B., M.D., C.M., F.R.C.S.Eng., LL.D., 27, Weymouth Street, W. 1
LEATHES, J. B., M.B., B.Ch.Oxon., F.R.C.S.Eng., The University, Sheffield
LEVICK, G. MURRAY, M.R.C.S., L.R.C.P., 36, Harley Street, W. 1
LOW, HAROLD, M.A., M.B., B.C.Cantab., 10, Evelyn Gardens, South Kensington, S.W.

McKAY, R., 5, Chandos Street, Cavendish Square, W. 1
MACKENZIE, Sir HECTOR W. G., M.A., M.D.Cantab., F.R.C.P., 34, Upper Brook Street, W. 1
MACLEAN, Prof. H., M.D., D.Sc.Lond., M.R.C.P., 2, Elm Park Gardens, Chelsea, S.W. 10
MAKINS, Sir G. H., G.C.M.G., C.B., F.R.C.S.Eng., 33, Wilton Place, S.W. 1
MARRIAGE, H. J., M.B., B.S.Lond., F.R.C.S.Eng., 109, Harley Street, W. 1
MAXWELL, L. B., O.B.E., B.A., M.B., B.Ch.Cantab., St. Thomas's Hospital, S.E. 1
MAYBURY, A. V., M.D., Ashford House, Mile End, Landport
MAYBURY, B. C., M.B., B.S.Lond., F.R.C.S.Eng., 42, Wimpole Street, W. 1
MELLANBY, Prof. J., M.A., M.D.Cantab., The Laurels, Englefield Green, Surrey
MENNELL, JAMES B., M.A., M.D., B.Ch.Cantab., 19, Park Crescent, Portland Place, W. 1; 1, Royal Crescent, Holland Park Avenue, W. 11
MENNELL, Z., M.B.Lond., 8, Hyde Park Terrace, W. 2
MILLS-ROBERTS, R. H., C.M.G., F.R.C.S.Edin., Plas Meini, Ffestiniog, N. Wales
MITCHINER, P. H., M.S., M.D.Lond., F.R.C.S.Eng., 8, Harley Street, W. 1

Nelson, W. E., O.B.E., M.A.Cantab., Green Gates, Henley-in-Arden
Newsholme, H. P., M.A., M.D., B.Ch.Oxon., M.R.C.P., Health Offices, Croydon
Nichol, F. E., M.A., M.B.Cantab., 1, Ethelbert Crescent, Margate
Nitch, C. A. R., M.S.Lond., F.R.C.S.Eng., 69, Harley Street, W. 1

Page, C. Max., D.S.O., M.S.Lond., F.R.C.S.Eng., 134, Harley Street, W. 1
Parsons, Prof. F. G., F.R.C.S.Eng., 245, Temple Chambers, E.C. 4
Perkins, G., M.C., M.B., M.Ch.Oxon., F.R.C.S.Eng., 102, Harley Street, W. 1
Perkins, J. J., M.A., M.B., B.C.Cantab., F.R.C.P., 57, Harley Street, W. 1
Peyton, W. de M., O.B.E., B.A., M.B., B.Ch., 43, Manchester Street, W. 1
Plimmer, Prof. R. H. A., D.Sc., 32, Steele's Road, Hampstead, N.W. 3
Planck, C., M.A.Cantab., County Asylum, Haywards Heath, Sussex
Prain, J. L., M.D., F.R.C.S.Eng., English Hospital, Casilla, 1213, Valparaiso, Chili, South America

Rayner, H., M.D., C.M.Aberd., M.R.C.P.Edin., Upper Terrace House, Hampstead, N.W.
Reid, Prof. R. W., M.D.Aberd., F.R.C.S.Eng., 37, Albyn Place, Aberdeen
Reid, Sir Archibald D., K.B.E., C.M.G., 30, Welbeck Street, W. 1
Richardson, A. H., M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng., 10, Upper Wimpole Street, W. 1; 8, William Street, Lowndes Square, S.W. 1
Richardson, J. C. Ryder, M.A., M.B., B.C.Cantab., Saxmundham, Suffolk
Robinson, R. H. O. B., B.A., M.B., B.Ch.Cantab., F.R.C.S.Eng., St. Thomas's Hospital, S.E. 1
Rockliffe, W. C., M.A., M.D., 17, Charlotte Street, Hull
Romanis, W. H. C., M.A., M.B., M.Ch.Cantab., F.R.C.S.Eng., 31, Harley Street, W. 1
Royal Victoria Infirmary, Newcastle-on-Tyne (Medical Library)
Russell, A. E., M.D., B.S.Lond., F.R.C.P., 7, Upper Wimpole Street, W. 1
Russell, H. B., M.D.Lond., M.R.C.P., 28, New Cavendish Street, W. 1

Sargent, Percy W. G., C.M.G., D.S.O., M.A., M.B., B.C.Cantab., F.R.C.S.Eng., 20, Harley Street, W. 1
Sawyer, J. E. H., M.A., M.D., B.Ch.Oxon., M.R.C.P., Holton House, Burwash, Sussex
Sharkey, Sir Seymour J., Knt., M.A., M.D.Oxon., F.R.C.P., 24a, Portland Place, W.

Shattock, Prof. S. G., F.R.S., F.R.C.S.Eng., St. Thomas's Hospital, S.E. 1

Shearer, D. F., B.A., M.B., B.Ch.Oxon., F.R.C.S.Eng., The Hollies, Kidlington, Oxon.

Shelley, L. W., M.C., B.A., M.B., B.Ch.Cantab., 40, Lower Belgrave Street, Eaton Square, S.W. 1

Sherrington, Sir Charles Scott, G.B.E., M.A., M.D.Cantab., F.R.C.P., F.R.S., 9, Chadlington Road, Oxford

Smith, J. Forest, M.R.C.S., L.R.C.P., St. Thomas's Hospital, S.E. 1.

Smith, R. Percy, M.D., B.S.Lond., F.R.C.P., 36, Queen Anne Street, W. 1

South, R. E., J.P., Boston, Lincolnshire

Stainer, E., M.A., M.D., B.Ch.Oxon., F.R.C.P., Sly Corner, Lee Common, Gt. Missenden

Stilwell, G. R. F., O.B.E., M.B.Lond., 14, Southend Road, Beckenham, Kent

Stoddart, W. H. B., M.D.Lond., F.R.C.P., Harcourt House, Cavendish Square, W. 1

Strassburg Imperial University Library (Alsace)

Sutcliffe, W. G., O.B.E., F.R.C.S.Eng., 30, Dalby Square, Margate

Swallow, Allan J., M.B., B.S., 61, South Side, Clapham Common, S.W. 4

Taylor, J. F., B.A., M.D., B.Ch.Cantab., 47, Earl's Court Square, S.W.

Tidy, H. L., M.A., M.D., B.Ch.Oxon., F.R.C.P., 39, Devonshire Place, W. 1

Timberg, R., 150, Harley Street, W. 1; and 64, London Road, Reading

Truman, C. E., M.A.Cantab., The Warren, Slough

Turney, H. G., O.B.E., M.A., M.D.Oxon., F.R.C.P., 7, Park Square West, Regent's Park, N.W. 1

Tyrrell, W., M.R.C.S., L.R.C.P., 14, Vale Avenue, Chelsea, S.W. 5

University of Leeds, Thoresby Street, Leeds (The Hon. Librarian's Medical Dept.)

Urquhart, A. L., O.B.E., M.B., Ch.B.Edin., D.P.H.Lond., 31, Sussex Place, Regent's Park, N.W. 1

Usher, C. H., B.A., M.B., B.C.Cantab., F.R.C.S.Edin., 3, Bon Accord Square, Aberdeen

Wagstaffe, W. W., M.A., M.B., B.Ch.Oxon., F.R.C.S.Eng., 64, Woodstock Road, Oxford

Wallace, A. C., 1, Grange Terrace, The Grange, Guernsey

Wallace, Sir Cuthbert S., K.C.M.G., C.B., C.M.G., M.B., B.S. Lond., F.R.C.S.Eng., 26, Upper Wimpole Street, W.

Walters, F. R., M.D.Lond., M.R.C.P., F.R.C.S.Eng., Pinecroft, Farnham, Surrey

WESSELOW, O. L. V. S. DE, B.A., M.B., B.Ch.Oxon., F.R.C.P., 1, Burgh Heath Road, Epsom

WHITE, E. F., F.R.C.S.Eng., "Westlands," 388, Upper Richmond Road, Putney, S.W.

WILLIAMS, B. W., B.A., M.B., B.Ch.Oxon., 42, Greycoat Gardens, S.W. 1

WILSON, H. B., O.B.E., B.A., M.B., B.Ch.Cantab., 27, Gloucester Terrace, Hyde Park, W. 2

WRIGHT, E. H., Major I.M.S., c/o Messrs. King & Co., 9, Pall Mall, S.W. 1

WYATT, J. M., M.B., B.S.Lond., F.R.C.S.Eng., 17, Harley Street, W. 1

In order to facilitate the safe transmission of the 'St. Thomas's Hospital Reports,' it is particularly requested that the attention of the Editors be directed to any inaccuracies in the above list of Subscribers.

EXCHANGE AND COMPLIMENTARY LIST.

St. Bartholomew's Hospital Reports
St. George's Hospital Reports
Guy's Hospital Reports
King's College Hospital Reports, Denmark Hill, S.E.
London Hospital Reports
Middlesex Hospital, W.
Westminster Hospital Reports
Transactions of the Medical Society of London, 11, Chandos Street. W.
Royal College of Physicians, London
Royal College of Surgeons, England
Library of British Medical Association, 429, Strand, W.C.
The Editor, Journal of the Pharmaceutical Society of Great Britain, 17, Bloomsbury Square, W.C.
Bristol Medico-Chirurgical Journal, Bristol (Medical Library, University of Bristol)
Le Progrès Médical (Dr. Bourneville, 6, Rue des Écoles, Paris)
Transactions of the New York Academy of Medicine, 17, 19, 21, West Forty-third Street, New York. (Exchange Copy)
The Johns Hopkins Hospital Library, North Broadway, Baltimore, Maryland
Royal College of Surgeons, Dublin (The Librarian)
Parkes Museum (Hon. Sec.), 90, Buckingham Palace Road, S.W.
Tokyo Medical Library, Kyobashiku, Japan
Senatus Academicus, University of Edinburgh
College of Physicians, Philadelphia
University of London, South Kensington
Harvard University, Medical School, Boston, Mass.
University of Toronto (The Library)
McGill University, Montreal (The Library, Faculty of Medicine)
University of Brussels (The Library)
The Pathological Laboratory, Maudsley Hospital, Denmark Hill, S.E.
Pathological Laboratory, The University, Liverpool
Journal of Medical Research (Editorial Office, 240, Longwood Avenue, Boston, Mass., U.S.A.). (Marked "Exchange Copy")
School of Medicine, Cairo (The Director)
The Exchange Department, University Library, Berkeley, California, U.S.A.
Birmingham Medical Review, Birmingham
Glasgow Medical Journal, Glasgow

Practitioner, 31, Craven Street, Strand, W.C.
The Medical Research Council, 15, York Buildings, Adelphi, W.C. 2
Metropolitan Asylums Board, Victoria Embankment, E.C.
The Royal Society of Medicine, Wimpole Street, W.
Journal Royal Army Medical Corps, 56, Cromwell House, Stamford Street, S.E.
The Library, Surgeon General's Office, U.S. Army, Washington (Kegan Paul, Trench, Truebner and Co., Ltd., 68, Carter Lane, Agents)
Royal University, Upsala, Sweden (Librarian)
University College, Dundee (Librarian)
University of Sydney Medical Society, Sydney (Hon. Librarian)
University of Illinois Library (Librarian), Urbana, Illinois, U.S.A.
The Presbyterian Hospital, Madison Avenue, New York
Research Laboratory (Librarian), Foot of East 16th Street, New York City
The National Library of Wales, Aberystwith (Librarian)
The Editor, Acta Chirurgia, Scandinavia, Stockholm
York Medical Society, York

Exchange copies should be addressed to the Librarian, St. Thomas's Hospital.

GENERAL REPORT.

1921.

Combined Medical, Surgical, and Gynæcological Report, 1921,

BY

J. FOREST-SMITH, M.R.C.S., L.R.C.P.,

P. H. MITCHINER, M.D., M.S.Lond., F.R.C.S.Eng.,

AND

A. H. RICHARDSON, M.A., M.B., B.Ch.Cantab.,
F.R.C.S.Eng.

TABLE I.—*Statistical Statement of the Incidence of Disease*

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
I. GENERAL DISEASES.																					
1. Anæmia—																					
(*a*) Pernicious	9	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
(*b*) Aplastic	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
(*c*) Chlorosis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...
(*d*) Secondary anæmia	4	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...
(*e*) Splenic anæmia	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
2. Debility	24	...	...	...	...	...	3	...	...	1	4	...	...	...	6	...	...	...	4	...	...
3. Diabetes—																					
(*a*) Glycosuria	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Diabetes mellitus	30	...	...	...	...	...	1	...	...	1	1	...	...	2	3	1	...	2	...	2	...
4. Diphtheria	4	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Enteric fever	7	...	...	...	...	...	1	...	...	...	3	...	...	1	1	...	...	1	...	...	...
6. Erysipelas	10	2	2	...	...	...	...	...	...	...	3	...	...	...	1	...	...	...	...	...	...
7. Pyrexia	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...
8. Gonorrhœa	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
9. Gout	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
10. Influenza	20	...	...	...	...	...	...	...	...	2	...	...	...	8	7	...	...	1	2	...	...
11. Leukæmia—																					
(*a*) Myelæmia	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
(*b*) Lymphæmia	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
12. Lymphadenoma	16	...	...	...	...	...	1	1	...	3	...	1	...	3	1	...	...	1	1	2	...
13. Malaria	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
14. Marasmus	20	7	6	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15. Measles	5	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16. Pyæmia	9	1	1	...	...	1	1	...	...	1	...	...	1	1	...	...	...	...	...	...	...
17. Purpura	3	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...
18. (*a*) Rheumatic fever	31	...	...	...	...	1	4	...	...	12	6	...	...	4	1	...	...	1	...	...	...
18. (*b*) Subacute rheumatism	12	...	...	...	...	1	1	...	...	1	5	...	...	1	1	...	...	...	...	...	...
19. (*a*) Rheumatoid arthritis	10	...	...	...	...	1	...	...	...	...	2	...	...	...	2	...	...	1	1	...	...
19. (*b*) Chronic rheumatism	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
20. Rickets	11	5	4	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. Scarlet fever	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
22. Septicæmia	3	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Syphilis—																					
(*a*) Congenital	6	2	1	...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
(*b*) Acquired	7	...	...	...	...	...	...	...	...	1	...	...	...	2	1	...	...	1	2	...	...
24. Tetanus	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
25. General tuberculosis	3	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
26. Abscess (acute)	146	14	11	...	1	10	2	...	...	13	14	...	...	14	14	...	...	6	8	...	...
27. Abscess (chronic)	38	...	...	...	...	2	2	...	...	1	7	...	...	3	3	...	...	6	3	...	...
28. Cellulitis	103	1	5	1	...	5	4	...	...	14	5	...	...	9	5	1	...	10	9	...	...
29. Sinus	31	...	...	...	...	1	1	...	...	4	6	...	...	5	5	...	...	...	...	...	...

and Injuries, Medical, Surgical and Gynæcological.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	
2	...	1	...	1	2	...	...	...	...	1	...	4	2	2	1	See special abstracts.
...	...	...	...	1	1	...	...	...	...	...	...	2	1	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
2	4	...	...	...	...	...	...	...	...	...	...	3	21	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
5	5	...	1	2	2	...	...	1	1	...	...	13	13	3	1	See special abstracts.
...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	See special abstracts.
.	...	...	...	..	...	...	...	...	...	...	...	2	5	...	...	See special abstracts.
...	...	...	...	1	1	...	...	...	...	...	...	3	7	...	...	
...	.	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
.	..	...	...	...	...	...	...	...	..	...	...	1	1	...	...	Excluding Venereal Ward.
1	...	...	...	1	...	...	...	...	...	...	...	3	...	...	...	
...	...	...	...	...	..	...	...	...	...	...	...	11	9	...	...	
1	...	...	...	1	...	...	...	...	...	...	...	2	1	...	1	
...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	
1	...	...	...	1	...	...	...	...	...	...	...	9	3	4	...	
...	...	...	...	...	...	...	...	1	...	...	...	3	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	7	6	6	1	
...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...	
...	...	...	...	1	...	...	1	...	...	...	...	5	2	...	2	
...	...	...	...	...	...	...	...	...	...	..	...	2	1	...	...	
...	1	...	...	1	...	...	...	...	...	...	...	19	12	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	5	7	...	...	
...	1	...	...	...	...	...	...	1	1	...	...	3	7	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	7	4	...	...	See also 158.
...	...	...	...	...	..	...	...	...	...	...	...	...	1	...	...	
...	...	1	...	...	...	...	...	..	...	...	...	...	...	2	1	
...	...	...	...	...	...	...	...	...	..	...	...	4	2	...	...	1 case of congenital infection shown as tabes.
...	...	...	.	.	..		...	...	...	...	...	4	3	...	...	Excluding Venereal Ward.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	2	See 178. 8 cases of meningitis, all fatal.
16	7	...	...	5	3	...	...	7	1	...	...	85	60	...	1	
4	2	...	...	2	2	...	...	1	...	...	...	19	19	...	...	
9	3	...	...	8	6	1	...	2	4	...	...	59	41	3	...	
2	4	...	...	...	3	...	...	...	...	...	...	12	19	...	...	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
I. GENERAL DISEASES—*cont.*																					
30. Carbuncle and furuncle	26	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	2	...	...	...
31. Various infections and general diseases—																					
(*a*) Anthrax . .	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*b*) Actinomycosis .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Glanders . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
(*d*) Scurvy . .	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Obesity . .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*f*) Pellagra . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II. DISEASES OF RESPIRATORY SYSTEM.																					
32. (*a*) Deflected nasal septum	146	...	...	...	...	...	...	...	...	33	15	...	...	40	25	...	...	10	9	...	...
32. (*b*) Hypertrophic rhinitis	8	...	...	...	...	1	...	...	...	...	1	...	...	1	3	...	...	...	2	...	...
32. (*c*) Various . .	37	2	2	...	...	...	1	...	...	2	4	...	...	4	4	...	...	1	4	...	...
33. Antrum and sinus .	70	...	...	...	...	...	...	...	...	3	5	...	...	6	15	1	...	5	19	...	...
34. Larynx . . .	17	1	...	1	...	...	...	...	...	1	1	...	...	1	1	...	...	3	1	...	...
35. Bronchitis . . .	44	3	4	...	...	3	2	...	...	7	...	...	...	4	3	...	...	4	5	...	...
36. Broncho-pneumonia .	70	19	11	5	8	8	6	2	...	2	2	...	2	...	...	...	...	3	...	...	...
37. Lobar pneumonia .	62	...	5	1	2	5	6	...	1	7	5	...	...	9	1	...	...	5	1	3	1
38. Bronchiectasis . .	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...
39. Pulmonary tuberculosis	81	1	1	...	...	...	1	...	...	6	11	...	...	15	16	1	2	5	6	1	...
40. Pleurisy . . .	38	...	1	...	...	5	1	...	...	6	2	...	...	7	4	...	...	4	1	...	...
41. Empyema . . .	26	1	1	1	1	3	3	...	...	1	1	...	...	1	2	...	...	4	1	1	...
42. Pneumothorax . .	3	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...
43. Growth of lung and mediastinum	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
44. Respiratory, various—																					
(*a*) Fibrosis of lung .	8	...	1	...	...	...	2	...	...	1	...	...	...	...	...	...	...	...	1	...	...
(*b*) Abscess of lung .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
(*c*) Asthma . .	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...
(*d*) Whooping-cough .	4	2	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
III. DISEASES OF CIRCULATORY SYSTEM.																					
45. (*a*) Thoracic aneurysm	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45. (*b*) Aneurysm, various	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1
46. Aortic disease . .	16	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...
47. Arterio-sclerosis . .	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
7	2	...	...	4	1	...	...	2	1	...	...	22	4	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	..	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	
8	2	...	...	2	...	...	...	2	...	...	...	95	51	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	6	...	...	
3	4	...	..	...	1	...	...	5	..	...	...	17	20	...	...	
1	7	...	...	...	1	..	...	3	2	2	..	18	49	3	...	
1	...	1	...	2	1	1	...	1	...	...	...	10	4	3	...	
2	1	...	...	1	1	1	...	...	3	...	...	24	19	1	...	
1	...	...	1	..	...	...	...	...	...	...	...	33	19	7	11	
1	3	1	...	...	...	2	...	...	1	1	1	27	22	8	5	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	
4	2	2	1	3	...	1	...	2	...	...	...	36	47	5	3	
2	1	...	...	1	1	..	...	1	1	...	..	26	12	...	...	1 case of endothelioma of pleura.
...	1	...	...	1	1	...	...	1	1	...	...	12	11	2	1	
...	...	...	...	...	...	...	...	...	...	..	...	3	...	...	...	
1	2	2	...	..	...	3	...	2	1	1	...	4	4	7	...	
1	2	...	...	...	...	...	...	...	...	...	...	2	6	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	
...	..	...	2	...	...	...	..	...	...	...	...	1	2	...	2	
...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	
3	1	1	...	4	...	3	...	1	...	...	...	8	1	4	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	
2	...	1	...	6	1	...	...	2	2	...	...	12	3	1	...	
1	...	...	...	1	1	...	...	...	...	...	1	3	1	...	1	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
III. DISEASES OF CIRCULATORY SYSTEM—*cont.*																					
48. (*a*) Malignant endocarditis	8	...	...	...	...	...	...	...	...	...	...	1	...	...	...	4	1	...	...	1	...
48. (*b*) Rheumatic endocarditis	16	...	...	...	...	1	4	1	...	3	5	...	...	...	...	...	...	...	2	...	...
49. Gangrene . . .	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
50. Mitral disease . .	40	...	...	...	...	...	1	...	...	4	7	...	1	5	3	1	1	2	5	...	...
51. Mitral and aortic disease	11	...	...	...	...	1	...	...	...	1	...	1	...	1	2	...	1	2	...	...	...
52. Myocarditis . .	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
53. Pericarditis . .	6	...	...	...	...	...	1	...	...	2	...	1	...	...	1	...	...	1	...	...	...
54. Varicocele . . .	10	...	...	...	...	...	...	...	...	4	...	...	...	5	...	...	...	...	...	...	...
55. Varicose veins . .	65	...	...	...	...	...	...	...	...	3	...	...	...	14	5	...	...	8	12	...	...
56. Thrombosis . .	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
57. Congenital heart disease	5	...	...	...	...	...	3	...	...	...	...	...	...	1	..	...	...	...	...	..	...
58. Circulatory, various—																					
(*a*) Auricular fibrillation	6	...	...	...	...	...	...	...	...	...	...	...	..	1	...	...	...	1	...	...	...
(*b*) Tachycardia .	4	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
(*c*) Heart-block .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Vasomotor neurosis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
IV. DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUES.																					
59. Cysts—Skin and subcutaneous tissue	20	5	2	...	...	...	...	...	...	...	...	...	...	1	4	...	...	2	...	...	...
60. Tumours . . .	113	5	5	...	...	...	...	...	...	3	3	...	...	7	9	1	1	1	10	...	...
61. Ulcers . .	17	...	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	1	1	...	...
62. Skin, various . .	24	2	3	...	...	...	3	...	...	1	...	...	...	1	1	...	...	3	1	...	...
V. DISEASES OF DIGESTIVE SYSTEM.																					
63. Mouth and pharynx .	55	3	3	...	...	...	...	...	...	3	5	...	...	...	...	...	...	2	3	...	..
64. Tonsils and adenoids .	739	46	39	...	...	121	93	...	...	136	128	...	...	18	40	...	...	7	9	...	...
65. Tongue and lips . .	55	...	1	...	1	...	...	...	...	...	...	...	...	1	1	...	...	...	2	...	...
66. Œsophagus . . .	30	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...
67. Stomach—																					
(*a*) Ulcer . . .	61	...	...	...	...	...	...	...	...	...	1	...	...	1	10	...	...	8	7	...	1
(*b*) Carcinoma . .	50	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	1	...
(*c*) Dilatation . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	...	...	1	...	...	...	...	...	...	...	...	...	...	6	2	
...	...	...	...	...	...	...	...	...	...	...	...	4	11	1	...	
...	...	...	...	...	...	...	...	2	1	...	...	3	1	...	...	
1	7	...	1	1	..	..	...	...	...	...	...	13	23	1	3	
...	1	...	...	1	...	...	...	...	...	...	...	6	3	1	1	
...	...	...	...	2	2	2	...	...	...	..	1	3	2	2	1	
...	...	...	...	...	...	...	...	...	...	...	...	3	2	1	...	
...	...	...	...	1	...	...	...	...	...	...	...	10	...	...	...	
11	6	...	1	3	1	...	...	1	...	...	...	40	24	...	1	
...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	2	3	...	...	
...	1	...	...	1	2	...	...	...	...	...	...	3	3	...	...	
1	...	...	...	...	1	...	...	...	...	...	...	2	2	...	...	
...	...	...	...	1	...	...	...	1	...	...	...	2	...	...	...	
...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	
1	2	...	...	1	...	...	...	2	...	...	...	12	8	...	...	
7	12	...	...	7	11	...	...	22	9	...	...	52	59	1	1	
1	2	...	...	5	2	...	...	2	...	...	...	11	6	...	...	
3	...	...	...	2	2	...	...	1	1	...	...	13	11	...	...	
6	3	...	...	12	1	3	...	11	...	..	...	37	15	3	...	
...	1	...	...	1	...	...	...	..	...	...	...	329	410	...	...	
8	2	...	...	11	2	...	...	20	4	2	...	40	12	2	1	
2	...	1	...	10	...	3	...	4	1	5	...	17	2	10	1	
3	8	...	...	5	12	2	1	1	...	1	...	18	38	3	2	
3	2	1	2	10	6	5	2	9	4	4	1	22	12	11	5	
...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
V. DISEASES OF DIGESTIVE SYSTEM—*continued.*																					
67. Stomach—*continued.*																					
(*d*) Congenital pyloric stenosis	3	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Various . .	12	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
68. Duodenum—																					
(*a*) Ulcer . . .	49	...	...	...	...	...	...	...	...	...	...	...	...	5	1	...	...	14	1	1	...
(*b*) Perforated ulcer .	15	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	2	1	...	...
69. Hæmatemesis . .	14	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	2	1	...	...
Melæna . . .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
70. Intestinal, various—																					
(*a*) Simple . . .	12	...	1	...	...	1	...	...	...	1	...	...	...	1	...	...	...	1	2	...	1
(*b*) Malignant . .	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
71. Appendicitis, quiescent	139	2	...	...	...	...	3	...	...	15	19	...	...	16	36	...	...	8	19	...	...
72. Appendix abscess .	32	1	...	...	...	2	...	...	...	4	4	1	...	3	2	...	...	4	2	1	...
73. Appendicitis, acute .	244	3	2	...	1	12	6	...	...	46	35	4	2	30	40	2	1	15	11	1	1
74. Colitis	21	2	1	...	...	2	...	...	...	...	...	...	...	6	1	...	...	2	...	...	...
75. Intestinal obstruction—																					
(*a*) Simple . .	17	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...
(*b*) Malignant . .	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
(*c*) Intussusception .	30	15	9	...	...	2	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...
76. Rectum and anus .	56	1	...	...	...	1	1	...	...	...	...	...	...	2	1	...	...	1	4	1	...
77. Hæmorrhoids . .	92	...	...	...	...	...	...	...	...	...	1	...	...	7	8	...	...	16	15	...	...
78. Fistula and fissure *in ano*	22	...	...	...	...	...	1	...	...	...	...	...	...	2	3	...	...	1	3	...	...
79. Abdominal pain . .	95	2	...	...	...	2	1	...	...	9	1	...	...	7	9	...	...	12	12	...	...
80. Constipation . .	15	1	1	...	...	1	...	...	...	...	...	...	...	1	4	...	...	...	2	...	...
81. (*a*) Vomiting . .	12	1	3	...	...	2	2	...	...	1	1	...	...	1	1	...	...	...	...	...	...
81. (*b*) Dysentery and diarrhœa	8	2	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	1
82. Dyspepsia . . .	31	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	4	5	...	...
83. Dysphagia . . .	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
84. (*a*) Gastro-enteritis .	11	1	2	...	...	1	...	...	...	2	1	...	...	...	1	...	...	1	...	...	...
84. (*b*) Epidemic gastro-enteritis	33	11	7	8	5	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
85. Abdominal, various—																					
(*a*) Visceroptosis .	34	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	1	8	...	...
(*b*) Neoplasm . .	10	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
(*c*) Various . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
86. Foreign bodies in intestinal tract	17	2	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	1	3	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	0	
2	1	...	...	4	2	..	...	...	1	...	...	8	4	...	...	
17	1	1	...	4	1	2	...	...	...	1	...	40	4	5	...	
4	1	...	...	1	...	...	...	1	...	1	...	12	2	1	...	
3	1	...	...	2	...	...	...	1	...	...	...	12	2	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	...	
...	...	...	...	3	...	...	1	...	...	...	...	7	3	...	2	
2	2	...	...	2	2	2	...	2	3	2	...	6	7	5	...	
8	8	...	...	2	2	...	...	2	1	...	...	51	88	...	...	
4	2	...	...	1	1	...	...	...	...	...	.	19	11	2	...	17 cases readmitted and appendicectomy performed in quiescent period.
8	3	1	1	5	3	1	2	1	2	1	...	120	106	10	8	
1	3	...	...	1	2	...	...	...	...	...	...	14	7	...	...	
...	2	2	...	2	2	...	2	1	1	2	...	5	5	5	2	
...	1	...	...	3	2	1	...	2	...	1	...	5	4	2	1	
1	..	...	...	...	...	...	...	...	..	...	...	20	10	...	...	1 case readmitted with recurrence.
4	5	...	1	4	2	2	...	15	9	1	1	28	22	4	2	
14	12	...	...	9	7	...	...	2	1	...	...	48	44	...	...	
4	2	...	...	3	2	...	...	1	...	...	...	11	11	...	...	
9	9	...	...	2	9	...	...	5	6	...	...	48	47	...	...	
...	2	...	...	1	2	...	...	...	...	...	...	4	11	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	5	7	...	.	
1	1	...	...	...	...	...	...	...	...	..	...	6	1	...	1	1 case of cœliac disease, 1 fatal case of sprue, 2 cases of amœbic dysentery.
8	7	...	...	1	...	1	...	1	...	...	...	16	14	1	...	Fatal case died from post-anæsthetic pneumonia following gastro-enterostomy. At post-mortem no lesion of stomach or duodenum found.
2	...	...	...	1	1	.	...	...	...	...	...	4	1	...	...	
1	1	...	...	...	...	...	...	...	...	...	...	6	5	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	12	8	8	5	
..	9	...	...	2	5	...	...	1	1	...	...	4	30	...	...	
...	2	...	...	...	2	1	...	1	1	...	...	3	6	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	A case of multiple hydatid cysts of peritoneum.
...	...	...	...	...	1	...	...	2	3	...	...	8	9	...	...	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
VI. DISEASES OF DIGESTIVE GLANDS.																					
87. Salivary glands . .	24	...	...	...	...	1	1	...	...	1	...	...	...	1	4	...	...	2	4	...	...
88. Cirrhosis of liver .	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
89. Cholelithiasis . .	60	...	...	...	...	...	...	...	...	...	1	...	...	2	4	...	...	9	3	...	...
90. Cholecystitis . .	32	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	5	...	...
91. Jaundice—																					
(*a*) Catarrhal . .	16	...	2	...	...	4	1	...	...	...	...	...	...	1	5	...	...	1	1	...	...
(*b*) Other types . .	6	...	...	...	...	...	...	...	...	...	1	...	...	..	1	...	...	1	.	...	...
92. Pancreas . . .	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
93. Digestive, various—																					
(*a*) Carcinoma of liver	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Tropical abscess .	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*c*) Enlarged liver .	3	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(*d*) Worms . .	7	1	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...	1	1	...	...
VII. DISEASES OF THE PERITONEUM.																					
94. Ascites	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
95. Tuberculous peritonitis	18	1	...	...	...	5	...	...	...	3	2	...	...	3	2	...	...	...	1	...	...
96. (*a*) Peritonitis of unknown cause	3	...	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...
96. (*b*) Retro-peritoneal sarcoma	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
96. (*c*) Peritoneal adhesions	13	...	...	...	...	...	...	...	...	2	...	...	...	1	3	...	...	1	1	...	...
97. HERNIA—																					
A. Inguinal—																					
(*a*) Reducible . .	331	56	1	...	...	19	11	...	...	37	9	...	...	40	12	...	...	57	7	...	...
(*b*) Irreducible .	14	...	...	...	...	...	...	...	...	2	...	...	..	2	...	...	...	1	1	...	...
(*c*) Straugulated .	18	1	..	...	...	...	...	...	...	1	...	...	...	2	...	...	...	2	...	...	...
(*d*) Recurrent . .	12	1	...	...	...	...	...	...	...	1	1	...	...	1	1	...	...	...	1	...	...
B. Femoral—																					
(*a*) Reducible . .	30	...	...	...	...	...	1	...	...	...	4	...	...	1	5	...	...	...	11	...	...
(*b*) Irreducible .	20	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	1	4	...	...
(*c*) Strangulated .	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...
(*d*) Recurrent . .	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	...	...	...	7	...	...	...	1	2	...	...	13	11	...	...	
1	...	1	...	3	...	1	...	...	1	...	...	4	1	2	1	1 case had laparotomy. Talma-Morrison operation in 1 case.
5	8	1	1	4	5	...	1	5	10	...	1	25	31	1	3	
2	7	...	1	1	4	1	1	1	4	2	...	6	21	3	2	
...	...	...	...	...	...	...	...	...	1	...	...	7	9	...	...	
1	...	...	...	1	...	...	1	...	...	...	...	4	2	...	...	2 cases of acholuric jaundice, 2 cases following arsenic, 1 case due to syphilis, and the cause unknown in 1 case.
...	...	1	...	3	1	1	1	1	...	...	1	4	2	3	3	
...	...	...	...	...	...	...	...	3	...	...	...	3	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	5	2	...	...	All tape-worm infections.
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	12	6	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	
...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	2	
...	2	...	...	1	2	...	...	...	...	...	...	5	8	...	...	
38	8	...	...	28	2	...	...	6	...	...	...	281	50	...	...	
...	1	...	...	3	1	...	...	3	...	...	...	11	3	...	...	
2	...	...	...	6	...	1	...	3	...	...	...	17	1	...	...	
4	...	...	...	1	...	1	...	...	...	...	...	8	3	1	...	
3	3	...	...	...	1	...	...	1	...	...	...	5	25	...	...	
1	5	...	...	2	3	...	...	...	1	...	...	5	15	...	...	
1	3	...	...	...	6	...	...	1	3	...	1	3	16	...	1	
...	1	...	...	1	...	...	...	...	1	...	...	1	4	...	...	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
VII. DISEASES OF THE PERITONEUM—*continued.*																					
97. HERNIA—*continued.*																					
C. Umbilical and ventral—																					
(*a*) Reducible and irreducible	44	6	4	...	...	2	2	...	...	2	...	...	...	1	...	...	...	2	3	...	...
(*b*) Strangulated .	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Recurrent .	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
D. Various . . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VIII. DISEASES OF LYMPHATIC SYSTEM.																					
98. Adenitis—																					
(*a*) Simple . .	19	1	1	...	...	2	1	...	...	2	1	...	...	5	1	...	...	...	2	...	...
(*b*) Tuberculous .	109	1	3	...	...	2	10	...	...	18	29	...	...	4	21	...	...	3	8	...	...
99. Glands, carcinoma .	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
100. Glands, various . .	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
IX. DISEASES OF DUCTLESS GLANDS.																					
101. Addison's disease .	8	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1	1	...
102. Exophthalmic goitre .	52	...	...	...	...	...	...	...	...	...	2	...	...	...	13	...	...	1	12	...	...
103. Thyroid . . .	54	...	...	...	...	...	...	...	...	4	7	...	...	2	9	...	1	2	13	...	...
104. Ductless glands, varions—																					
(*a*) Spleen . .	7	1	1	...	...	2	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
(*b*) Pituitary . .	3	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
(*c*) Various . .	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
X. DISEASES OF THE GENITAL SYSTEM.																					
105. Breast—																					
(*a*) Simple . .	55	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	1	13	...	...
(*b*) Malignant . .	70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
106. Testicle, undescended .	8	...	...	...	...	2	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...
107. Testicle, various . .	31	...	...	...	...	...	...	...	...	2	...	...	...	9	...	...	...	6	...	1	...
108. Tunica and processus vaginalis	44	7	...	...	...	3	...	...	...	3	...	...	...	5	...	...	...	10	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
2	7	...	...	2	7	...	1	...	3	...	...	17	26	...	1	
2	...	...	...	...	...	...	1	...	2	...	...	2	2	...	1	
...	3	...	...	...	1	...	...	...	...	...	...	...	4	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
2	...	...	...	...	...	...	...	1	...	...	...	13	6	...	...	
5	3	...	...	...	2	...	...	...	...	...	...	33	76	...	...	
2	...	...	...	4	...	...	...	5	1	...	...	12	1	...	...	
...	1	...	...	1	...	...	...	...	1	...	...	1	2	...	...	
1	2	...	1	...	...	...	...	...	...	...	...	2	4	1	1	
1	13	...	2	1	6	...	...	1	...	...	...	4	46	...	2	Both fatal cases occurred after operation. One patient had advanced mitral stenosis.
2	10	...	...	...	3	...	...	...	1	...	...	10	43	...	1	
...	...	...	...	...	1	...	...	...	...	...	...	3	4	...	...	2 cases of Banti's disease. 5 cases of splenomegaly.
...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...	2 cases of Fröhlich's disease. 1 case of acromegaly.
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1 case of hypothyroidism.
1	22	...	...	...	2	...	...	...	2	...	...	2	53	...	...	
2	23	...	...	...	18	...	2	1	17	...	...	3	65	...	2	
...	...	...	...	...	...	...	...	...	...	...	...	8	...	...	...	
6	...	...	...	7	...	...	...	...	...	...	...	29	...	1	...	
10	...	...	...	3	...	...	...	3	...	...	...	44	...	...	...	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—		
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
X. DISEASES OF THE GENITAL SYSTEM—*cont.*																				
109. Diseases of the ovary—																				
(*a*) Cysts, simple and multiple	24	...	...	...	...	...	...	...	...	...	1	...	...	...	8	...	...	...	6	...
(*b*) Other diseases, including malignant disease	18	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...
(*c*) Broad ligament cysts	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
110. Diseases of the Fallopian tubes—																				
(*a*) Salpingitis . .	17	...	...	...	...	...	...	...	...	...	2	...	...	...	6	...	...	...	6	...
(*b*) Pyosalpinx and tubo-ovarian abscess	9	...	...	...	...	...	...	...	...	...	1	...	...	...	4	...	...	...	3	...
(*c*) Carcinoma . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
111. Ectopic gestation .	15	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	4	...
112. Menstrual disorders—																				
(*a*) Menorrhagia and metrorrhagia	55	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	...	...	19	...
(*b*) Dysmenorrhœa .	36	...	...	...	...	...	...	...	...	...	2	...	...	...	18	...	...	...	16	...
113. Pregnancy and its disorders—																				
(*a*) Abortion . .	39	...	...	...	...	...	...	...	...	...	...	...	...	...	14	...	1	...	15	...
(*b*) to (*e*) Normal pregnancy	530	...	...	...	...	...	...	...	...	...	22	...	...	...	374	...	...	...	110	...
(*f*) Toxæmias of pregnancy	29	...	...	...	...	...	...	...	...	...	1	...	...	...	18	...	...	...	7	...
(*g*) Ante- and post-partum hæmorrhage	22	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	1	...	10	...
(*h*) Contracted pelvis .	16	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	7	...
(*i*) Obstructed labour	19	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	...	...	5	...
(*j*) Pregnancy, various	44	...	...	...	...	...	...	...	...	...	...	...	...	...	18	...	2	...	18	...
(*k*) Sequelæ of pregnancy	12	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	7	...
114. Diseases of the body of the uterus—																				
(*a*) Endometritis .	8	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	3	...
(*b*) Fibromyomata .	71	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	21	...
(*c*) Polypi, fibroid and mucous	16	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...
(*d*) Malignant disease	6	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
(*e*) Various . .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	2	...	...	...	5	...	...	...	2	...	...	...	24	...	...	
...	5	...	...	...	5	...	2	...	3	...	...	...	15	...	3	
...	1	...	...	...	1	...	...	...	...	...	...	...	3	...	...	
...	3	...	...	...	...	..	...	...	...	...	...	...	17	...	...	
...	...	...	...	...	1	...	...	...	...	...	...	...	9	...	...	
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	
...	1	...	...	...	...	...	...	...	...	...	...	...	14	...	1	
...	16	...	...	...	6	...	...	...	...	...	...	...	54	...	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	36	...	...	
...	6	...	...	...	1	...	...	...	...	...	...	...	36	...	3	
...	24	...	...	...	...	...	...	...	...	...	...	...	530	...	...	
...	3	...	...	...	...	...	...	...	...	...	...	...	29	...	...	
...	2	...	1	...	...	...	...	...	...	...	...	...	19	...	3	
...	2	...	...	...	...	...	...	...	...	...	...	...	16	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	...	19	...	...	
...	5	...	...	...	...	...	...	...	...	...	...	...	41	...	3	
...	...	...	1	...	...	...	...	...	...	...	...	...	11	...	1	
...	...	...	...	...	1	...	...	...	3	...	...	...	8	...	...	
...	37	...	...	...	8	...	1	...	3	...	...	...	70	...	1	
...	8	...	...	...	3	...	...	...	1	...	...	...	16	...	...	
...	1	...	...	...	3	...	...	...	...	...	1	...	5		1	
...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
X. DISEASES OF THE GENITAL SYSTEM—*cont.*																					
115. Diseases of the cervix—																					
(*a*) Carcinoma	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...
(*b*) Various	19	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	5	...	...
116. Pelvic inflammation	9	...	...	...	...	...	...	...	...	...	1	...	...	...	3	...	1	...	4	...	...
117. Vagina and vulva—																					
(*a*) Urethral caruncle	15	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	5	...	...
(*b*) Pruritus	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Neoplasms	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...
(*d*) Fistula	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
(*e*) Hæmatocolpos	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
(*f*) Various	8	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...
118. Ruptured perinæum	7	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	1	...	...
119. Prolapse and displacements—																					
(*a*) Prolapse of uterus	15	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
(*b*) Prolapse of vaginal walls	23	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	12	...	...
(*c*) Retroversion	13	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	8	...	...
(*d*) Inversion	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
120. Genital, various	10	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	5	...	...
XI. DISEASES OF THE URINARY SYSTEM.																					
121. Movable kidney	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
122. Renal calculus and colic	56	...	...	...	...	1	...	...	...	...	1	...	...	5	9	...	...	14	5	...	...
123. Hydronephrosis	5	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
124. Pyonephrosis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
125. Kidney and ureter, various	41	...	2	...	...	...	...	...	...	3	2	...	...	4	2	1	...	7	3	...	2
126. Acute nephritis	21	2	2	..	...	1	2	...	...	6	3	...	1	1	...	...	...	...	1	1	...
127. Chronic nephritis	42	...	...	..	...	...	1	...	...	2	3	1	...	2	1	2	...	3	1	2	.
128. Vesical calculus	7	...	...	..	..	..	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...
129. Vesical, various	48	...	...	...	...	...	...	...	...	1	...	...	...	2	3	...	...	2	6	...	...
130. Prostate	58	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
131. Urethra and external genitalia	36	2	...	...	...	3	...	...	...	12	...	...	...	4	...	...	...	1	...	...	...
132. Urethral stricture	46	1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	6	...	1	...
133. Urinary, various—																					
(*a*) Pyuria and bacilluria	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...
(*b*) Hæmaturia	9	...	...	...	...	1	1	...	...	...	...	...	...	2	...	...	...	1	...	...	...
(*c*) Oxaluria and phosphaturia	5	...	...	..	...	...	...	...	...	1	...	...	...	2	...	...	...	1	...	...	...
(*d*) Various	5	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	..	1	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F	M.	F.	M.	F.	
...	13	...	...	...	18	...	...	...	4	...	...	...	40	...	...	
...	6	...	...	...	6	...	...	...	...	...	...	...	19	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	8	...	1	
...	2	...	...	...	5	...	...	..	2	..	...	...	15	...	...	
...	1	...	...	...	3	...	...	...	...	...	...	...	4	...	...	
...	2	...	...	...	1	...	...	...	1	.	...	...	7	...	..	
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
...	...	...	...	...	...		.	...	...	...	...	.	2	..	...	
...	3	...	..		1	...	...	...	...	...	...	...	7	...	1	
...	2	..	...	...	..	...	...	...	1	...	..	...	7	...	...	
...	4	...	...	...	4	...	...	...	5	...	...	...	15	...	..	
...	4	...	.	...	6	...	.	...	...	...	...	...	23	...	...	
...	1	...	..	...	...	...	...	...	...	...	...	...	13	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	...	...	...	2	...	...	...	...	...	...	...	10	...	...	
...	3	...	...	...	...	...	...	1	...	...	...	1	6	...	...	
8	4	1	...	3	1	1	1	1	1	...	...	32	21	2	1	
1	2	...	...	...	1	...	...	...	...	...	...	2	3	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
1	3	...	2	1	1	2	...	2	3	...	...	18	16	3	4	
...	...	...	...	1	...	...	...	...	...	...	...	11	8	1	1	
4	3	4	...	2	2	2	2	4	...	...	1	17	11	11	3	1 case of renal infantilism.
2	...	...	...	2	...	...	...	1	..	...	...	6	1	...	...	
5	1	1	...	9	1	1	1	7	7	1	...	26	18	3	1	
3	...	...	...	10	...	1	..	35	...	9	...	48	...	10	...	
4	...	...	...	3	..	...	...	6	...	1	...	35	...	3	...	
8	...	4	...	12	...	1	...	11	...	...	...	40	...	6	...	
...	...	..	...	1	.	...	...	...	..	...	...	2	3	...	...	
1	...	...	...	2	1	.	...	...	...	...	...	7	2	...	...	
1	...	...	...	...	...	.	...	...	...	...	..	5	...	...	...	
...	1	...	...	...	...	...	...	.	...	...	...	1	4	...	...	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
XII. DISEASES OF MUSCULAR SYSTEM.																					
134. Muscles—																					
(*a*) Myopathy	4	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
(*b*) Myasthenia gravis	2	...	...	...	...	...	...	..	...	...	...	...	...	...	1	...	...	...	...	...	...
XIII. DISEASES OF BURSÆ AND TENDONS.																					
135. Bursæ and tendons	54	...	...	...	...	3	...	...	...	3	5	...	...	2	7	...	...	5	7	...	...
XIV. DISEASES OF OSSEOUS SYSTEM.																					
136. Periostitis	12	...	...	...	...	1	...	...	...	2	...	...	..	3	...	...	...	1	...	...	...
137. Osteomyelitis	34	1	4		...	2	1	..	...	7	3	1	...	8	1	...	...	1	2	...	...
138. Osteitis	5	...	...	.	...	...	.	...	...	1	...	...	.	2	...	...	...	1	..	...	...
139. Caries—																					
(*a*) Spinal	22	...	1	...	...	1	2	...	...	...	1	...	...	2	3	...	...	1	3	...	...
(*b*) Various	8	...	...	...	...	...	3	..	.	1	...	..	...	2	1	...	...	...	...	...	...
140. Necrosis	32	2	1	...	...	...	...	...	...	5	3	...	...	..	...	...	...	6	1	..	...
141. Bone tumours	11	...		...	...	...	...	...	...	1	4	...	...	...	...	...	...	...	2	...	...
142. Bone, various	5	...	...	...	...	...	.	...	...	...	2	..	...	...	1	...	...	...	...	...	...
143. Amputation stumps	1	...	...	...	...	...	1	...	...	1	1	...	...	...	1	...	...	1	...	...	...
XV. DISEASES OF ARTICULATORY SYSTEM.																					
144. Diseases of shoulder-joint	8	...	...	...	...	...	...	...	...	...	..	...	...	...	4	...	1	...	1	...	...
145. Elbow	3	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...
146. Wrist	7	...	...	...	...	...	...	...	...	...	4	...	...	...	1	...		...	2	...	..
147. Sacro-iliac	1	...	...	...	...	...	...	...	...	.	1	...	...	...	...	...	...	...	..	...	...
148. Hip—																					
(*a*) Tubercle	28	...	1	...	...	4	3	...	...	4	10	...	...	2	2	...	...	...	1	...	...
(*b*) Various	23	...	...	...	.	...	3	...	...	4	4	...	..	1	2	...	...	...	1	...	...
149. Knee—																					
(*a*) Tubercle	17	...		...	...	1	...	...	..	5	5	...	..	2	3	...	..	...	..	...	..
(*b*) Internal derangement	22	...	...	...	...	...	..	.	...	...	1	...	...	8	1	...	...	6	1	...	...
(*c*) Various	24	...	..	..	...	1	2	...		5	5	.	...	3	2	...	.	2	1	...	...
150. Ankle and tarsus	8	..	1	.	...	...		...	.	1	1		..	1	1	...	...	...	...	...	...
151. Joints, various	14	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	2	...	...	...
XVI. DEFORMITIES.																					
152. Talipes	50	17	5	...	...	5	5	...	...	3	10	...	...	...	1	...	...	...	1	...	...
153. Torticollis	10	...	...	...	...	2	5	...	...	1	1	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	
1	1	...	...	...	...	...	...	...	...	...	...	2	2	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	
3	5	...	...	3	4	...	...	1	6	...	...	20	34	...	...	
3	...	...	...	1	...	...	...	1	...	...	...	12	...	...	...	
3	...	..	...	...	...	...	...	...	.	...	..	22	11	1	...	
1	...	...	...	...	..	..	...	..	...	...	...	5	...	..	...	
2	3	...	...	1	2	...	...	...	...	.	...	7	15	...	...	
...	1	...	...	...	...	...	...	...	...	...	.	3	5	..	...	
3	3	...	...	4	3	...	...	1	...	...	..	21	11	...	..	
2	..	...	1	1	...	...	...	...	...	...	...	4	6	...	1	
...	1	...	...	1	...	...	...	...	...	...	...	1	4	...	...	
...	1	...	...	...	1	...	...	...	1	...	...	2	6	...	...	
..	...	...	...	1	...	...	...	...	1	...	...	1	6	...	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	
...	..	...	...	...	...	...	...	...	...	...	...	...	7	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	11	17	...	...	
1	2	...	...	...	2	...	...	2	1	...	...	8	15	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	9	8	...	...	
2	...	...	...	2	...	...	...	...	...	..	...	18	4	...	...	
...	1	...	...	1	1	...	.	...	...	...	...	12	12	...	...	
1	...	...	...	...	2	...	...	...	...	...	...	3	5	...	...	
3	1	...	...	3	3	...	...	...	...	...	...	8	6	...	...	
1	1	...	...	...	...	...	...	...	...	...	...	27	23	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	3	7	...	...	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.
XVI. DEFORMITIES.—*cont.*																					
154. Genu valgum and varum	11	1	5	...	...	...	1	...	...	1	2	...	...	...	1	...	...	...	...	...	...
155. Cicatricial contractures	3	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...
156. Hammer-toe . .	11	...	...	...	...	...	...	...	...	1	4	...	...	...	2	...	...	3	...	...	...
157. Pes planus, hallux valgus, etc.	29	...	...	...	...	...	...	...	...	2	6	...	...	3	4	...	...	1	2	...	...
158. Deformities, various .	31	6	2	...	...	4	2	...	...	2	6	...	...	...	2	...	...	...	3	...	...
XVII. MALFORMATIONS.																					
159. Hare lip and cleft palate	25	11	11	...	1	1	.	...	...	1	...	...	...	...	...	...	...	...	...	...	..
160. Head and neck . .	12	1	...	...	...	...	...	...	.	...	1	...	...	...	4	...	...	2	1	...	. .
161. Trunk . . .	9	1	2	1	...	1	...	.	...	3	...	...	...	...	..	...	...	1	...	...	.
162. Limbs . . .	10	3	3	...	...	2	2	...	...	.	.	...	...	...	...	...	...	...	...	...	...
XVIII. DISEASES OF AUDITORY SYSTEM.																					
163. Chronic otitis media .	76	...	1	...	...	2	1	...	...	15	18	...	1	5	15	1	...	..	5	1	...
164. Acute mastoiditis .	70	4	12	...	...	12	12	...	...	6	11	1	...	4	...	1	1	1	4	...	...
165. Auditory, various .	15	...	1	...	...	2	2	...	...	3	...	...	...	1	2	...	..	...	...	...	...
XIX. DISEASES OF THE NERVOUS SYSTEM.																					
166. Cerebral hæmorrhage .	12	...	...	1	1	...	...	...	...	...	...	...	...	...	...	.	...	...	...	1	2
167. Cerebral thrombosis .	3	...	...	...	...	...	...	...	..	...	..	...	...	...	...	..	...	1	...	...	...
168. Cerebro-spinal syphilis	9	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
169. Cerebral, various—																					
(*a*) Hydrocephalus .	5	...	1	2	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	..	..
(*b*) Headache and vertigo	9	...	...	...	...	...	1	...	...	1	...	...	...	1	2	...	...	...	1	...	...
(*c*) Cerebral abscess .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
(*d*) Mental disorder .	4	1	...	1	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...
170. Chorea . . .	27	...	...	...	...	1	3	...	...	6	14	...	...	..	3	...	...	...	...	...	...
171. Disseminated sclerosis	8	..	...	...	...	...	...	...	...	...	1	...	...	...	3	...	...	...	...	...	...
172. Epilepsy—																					
(*a*) Jacksonian . .	3	...	.	...	...	...	...	...	...	...	...	...	..	1	1	...	...	...	...	...	...
(*b*) Grand mal and petit mal	15	..	1	...	...	1	2	...	...	3	2	...	...	1	1	...	...	2	...	...	...
(*c*) Infantile convulsions	9	7	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	
...	...	...	...	...	...	...	...	...	...	...	...	2	9	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	4	7	...	...	
3	4	...	...	2	...	...	...	1	1	...	...	12	17	...	...	
2	1	...	...	...	1	...	...	...	...	...	...	14	17	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	13	11	...	1	
...	2	...	...	...	1	...	...	...	...	...	...	3	9	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	6	2	1	...	
...	...	...	...	..	...	...	...	...	...	...	...	5	5	...	...	
4	5	1	1	...	...	...	...	...	...	...	...	26	45	3	2	
...	...	...	...	...	1	...	...	...	...	...	...	27	40	2	1	
2	1	...	...	1	...	...	...	...	...	...	...	9	6	...	...	
...	...	1	1	...	...	...	1	1	1	...	2	1	1	3	7	2 fatal cases of birth injury in infants, æt. 6 and 14 days.
...	...	...	...	1		...	..	1	...	...	.	3	...	.	.	1 fatal case of thrombosis shown under "Tabes."
2	1	...	...	4	...	...	...	...	..	...	..	8	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...	
...	3	...	...	...	...	...	...	...	...	...	...	...	2	7	...	
...	..	...	...	...	...	..	..	...	...	...	...	...	...	1	..	See also 164.
...	...	...	...	...	...	..	..	...	...	...	...	2	1	1	...	1 case of dementia præcox. 3 mental defective children.
...	...	...	...	...	...	...	...	...	...	...	...	7	20	...	...	
...	1	...	...	...	2	...	...	...	1	...	...	...	8	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	
...	1	...	...	1	...	...	...	...	...	...	...	8	7	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	7	2	...	...	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
XIX. DISEASES OF THE NERVOUS SYSTEM—*cont.*																					
173. Functional disease	28	...	...	...	...	...	...	...	...	...	3	...	...	3	4	...	...	2	9	...	...
174. Encephalitis	24	2	...	1	1	2	...	...	...	5	7	...	...	...	...	...	2	...	1	...	...
175. Hemiplegia	16	1	...	...	...	2	2	...	...	2	1	...	...	1	...	...	...	1	1	...	...
176. Infantile paralysis	9	4	3	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
177. Intra-cranial tumour	14	...	...	...	...	1	1	...	...	1	1	...	...	2	...	1	2	1	1	1	...
178. Tuberculous meningitis	8	...	...	...	6	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
179. Meningitis, non-tubercular	11	2	...	3	1	...	...	1	1	...	...	1	...	...	1	...	...	...	...	...	...
180. Paraplegia	10	...	...	...	...	2	...	...	...	...	1	1	...	2	1	...	...	1	...	...	...
Diplegia	2	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
181. Sciatica	8	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	3	1	...	...
Trigeminal neuralgia	8	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
182. Nerves, various	4	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...
183. Multiple neuritis	11	...	...	...	...	...	2	...	...	...	...	...	...	1	...	...	...	2	3	...	...
184. Tabes	20	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	...
Dementia paralytica	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
185. Various spinal diseases—																					
(*a*) Ataxy	2	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
(*b*) Syringomyelia	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
(*c*) Subacute combined degeneration	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Tumour of spinal cord	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...
(*e*) Progressive muscular atrophy, lateral sclerosis and bulbar palsy	10	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
(*f*) Various	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XX. INJURIES.																					
186. Injuries of head—																					
(1) Fractured skull	30	2	...	...	...	3	1	1	...	4	...	...	...	5	...	1	...	5	...	1	...
(2) Concussion	44	3	4	...	...	6	3	...	...	8	2	...	...	2	1	...	...	3	1	...	...
(3) Scalp wounds	7	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(4) Various	10	1	1	...	...	2	1	...	...	1	1	...	...	3	...	...	...	...	...	...	...
187. Injuries to neck	6	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	1	1	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
2	3	...	...	1	1	...	...	...	...	...	...	8	20	...	...	
...	...	...	1	2	...	...	...	...	...	...	...	11	8	1	4	
...	1	...	...	2	...	...	...	2	...	...	...	11	5	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	6	3	...	...	See 158.
...	...	...	1	1	...	...	...	...	...	...	...	6	3	2	3	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	6	
...	...	1	...	...	...	...	...	...	...	...	...	2	1	6	2	
1	...	...	...	...	1	...	...	...	...	...	...	6	3	1	0	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1 case of cerebral and 1 of cerebellar diplegia.
1	...	...	...	...	...	...	...	...	1	...	...	6	2	...	...	
1	...	...	...	2	...	...	...	...	4	...	...	4	4	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	2 cases of Erb's palsy; 1 of brachial neuritis and 1 (seventh) nerve palsy.
3	...	...	...	...	...	...	...	...	...	...	...	6	5	...	...	
7	2	...	...	7	...	1	...	...	...	...	...	16	3	1	...	Fatal case died from cerebral thrombosis.
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1 case of Freidreich's ataxy; 1 following diphtheria.
...	2	...	...	...	...	...	...	...	...	...	...	1	3	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..	
1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	
2	1	...	...	...	3	...	...	2	...	...	...	5	5	...	...	
1	...	...	...	1	...	...	...	...	...	...	...	2	...	...	...	1 case of myelitis; 1 case of paralysis agitans.
2	...	...	1	1	...	...	...	1	...	2	...	23	1	5	1	
4	3	...	...	3	...	...	...	1	...	...	...	30	14	...	...	
2	...	..	...	1	1	...	...	...	1	...	...	4	3	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	7	3	...	...	
...	...	...	..	...	...	...	...	...	...	...	...	4	2	...	..	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.
XX. INJURIES—*continued.*																					
188. Upper extremity—																					
(*a*) Fractured humerus	23	2	...	...	...	6	3	...	...	7	...	...	...	...	1	...	...	...	...	...	...
(*b*) Fractured radius and ulna	40	...	1	...	...	1	3	...	...	11	1	...	...	2	1	...	...	6	3	...	...
(*c*) Other fractures .	11	...	...	...	...	...	...	...	...	1	...	...	...	2	1	...	...	3	...	...	...
(*d*) Injuries to soft parts	25	...	...	...	...	...	...	...	...	3	5	...	...	3	3	...	...	2	2	...	...
(*e*) Dislocations .	10	...	...	...	...	2	...	...	...	1	...	...	...	1	2	...	...	1	...	...	...
189. Injuries to thorax .	12	1	...	...	...	1	...	1	...	4	1	...	...	1	...	...	...	...	...	...	...
190. Injuries to abdomen .	6	1	...	...	1	...	...	...	...	1	...	...	...	1	...	...	...	2	...	...	...
191. Injuries to genito-urinary system	8	1	...	...	...	...	1	...	...	...	1	...	...	2	...	...	...	2	...	1	...
192. Fractured pelvis .	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
193. Injuries to lower limb—																					
(*a*) Fractured femur .	27	4	...	...	...	7	1	...	...	5	...	...	...	2	...	...	...	2	...	...	...
(*b*) Fractured patella .	11	...	...	...	...	...	...	...	...	1	...	...	...	2	2	...	...	1	...	...	...
(*c*) Fractured tibia and fibula	51	1	...	...	...	6	1	...	...	5	2	...	...	6	1	...	...	5	1	...	...
(*d*) Pott's fracture .	26	...	...	...	...	1	...	...	...	1	...	...	...	2	1	...	...	2	1	...	...
(*e*) Other fractures .	5	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	...	...	...
(*f*) Dislocations .	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*g*) Injuries to soft parts	42	1	1	...	...	5	2	1	...	5	5	...	...	6	2	...	...	4	1	...	...
194. Injuries to back . .	4	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...
195. Injuries to joints .	6	...	...	...	...	1	...	...	...	...	...	...	...	...	2	...	...	1	1	...	...
196. Injuries to nerves .	5	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...
197. Mal- and un-united fractures	12	...	...	...	...	...	2	...	...	1	...	...	...	1	...	...	...	5	...	...	...
198. Burns and scalds .	35	11	4	3	1	4	2	...	1	...	2	1	...	1	2	...	...	1	...	...	...
199. Poisons . . .	18	1	1	...	...	2	...	...	...	3	2	...	...	...	2	1	...	1	1	...	...
200. Unclassified—																					
(*a*) Coccydinia . .	5	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	2	...	...
(*b*) Lumbar and sacral pain	5	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...	...
(*c*) Metatarsalgia .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(*e*) Various . .	4	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60—				Result.				REMARKS.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	...	...	...	1	...	...	...	1	1	...	...	18	5	...	...	
2	2	...	...	2	1	...	...	1	3	...	...	25	15	...	...	
4	...	...	...	...	...	...	...	...	...	...	...	10	1	...	...	
3	2	...	...	1	...	...	...	...	1	...	...	12	13	...	...	
2	...	...	...	...	...	..	...	..	1	...	...	7	3	...	...	
2	...	...	...	1	...	...	...	...	...	...	...	10	1	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	1	
...	...	...	...	...	...	...	...	...	...	...	...	5	2	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
1	...	2	...	...	1	...	...	1	1	...	...	22	3	2	...	
3	...	...	...	2	...	...	...	..	...	...	...	9	2	...	...	
6	7	...	...	3	2	...	...	2	2	1	...	34	16	1	...	
8	4	...	...	2	2	...	...	2	...	...	...	18	8	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	5	...	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	1	1	..	...	
3	2	...	...	2	1	...	...	...	...	1	...	26	14	2	.	
1	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	3	3	...	...	
...	1	...	...	..	...	...	...	...	...	...	...	3	2	...	...	
1	1	...	...	1	...	...	..	...	...	...	...	9	3	...	...	
1	1	...	...	...	...	...	...	...	...	...	...	18	11	4	2	
2	...	...	...	...	1	...	...	1	...	...	...	10	7	1	...	Food poisons, 8; carbolic acid, 2; oxalic acid, 3; lead, 1; veronal, 1; acetanilide, 1; paraffin oil, 1. One fatal suicidal case with nitric acid; death from broncho-pneumonia 14 days after admission.
...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	3	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	2	...	...	..	...	...	...	...	...	...	...	1	3	...	...	1 case of insomnia; 1 of hiccough; 2 cases no disease was found.

ABSTRACTS AND REMARKS.

[*The numbers at the commencement of each paragraph correspond with those in Table I.*]

GENERAL DISEASES.

1. (*a*) Pernicious Anæmia.

9 cases, 3 of which were fatal.

Treatment.—Liquor arsenicalis in increasing doses to ♏xiij *t.d.s.* 1 also had intravenous N.A.B. and two intra-muscular injections.

Male, æt. 43. History: 8 months' progressive weakness, abdominal pain, tinnitus and syncopal attacks in the last month. No fever. Spleen not felt. No abnormal signs in central nervous system. Blood-count showed 1,800,000 red cells with a colour index of 1·1. Three months later the count was 2,900,000 and colour index of 1·0, and there was marked improvement in the general condition. A test-meal showed the absence of hydrochloric acid. In hospital epistaxis occurred once; no other hæmorrhages were noted.

Male, æt. 29. History: 9 months' progressive numbness and weakness of legs. The left abdominal reflex was absent. There were sensory changes below the knees. The knee-jerks and ankle-jerks were obtained with difficulty. The plantor response was flexor. The blood-count showed reds 2,400,000 with colour index of 1·1 and three weeks later reds 1,840,000 and colour index 1·6.

Male, æt. 40. Previous admission in 1920. On discharge the red cells numbered 1,650,000 and the colour index was 1·0. Under treatment with intra-muscular N.A.B. the blood-picture improved from 2,550,000 with a colour index of 1·0 to 5,440,000 red cells and a colour index of 0·8 three months later. There were no abnormal signs in the nervous system.

Male, æt. 53. History of 18 months' malaise, præcordial pain, œdema of legs and dyspnœa. The liver was palpable 3 in. down: the spleen was felt. The heart was enlarged, the apex beat being extended to the nipple line. The blood-count showed 2,500,000 red cells with colour index of 0·6, and two normoblasts were seen. The cardiac condition improved with rest, but there was an advanced anæmia on discharge. A test-meal showed absence of free HCl. The patient had had previous attacks of gout, and had one such in hospital.

Female, æt. 50. History of 3½ months' malaise, headache and nausea. On admission the red cells numbered 1,600,000. The colour index was 1·3.

Two months later the red cells were 2,300,000 and the colour index was 1·0. A test-meal showed no free HCl. The spleen was not palpable. No changes in the nervous system were detected save some retinal hæmorrhages.

Female, æt. 58. History of general malaise for 4 years. In the last year patient had complained of some sensory disturbances, but no changes in sensation were detected. The red cells on admission numbered 1,425,000 and on discharge 1,210,000, with a colour index which varied from 0·6 to 1·5. This patient had two intravenous injections of N.A.B.

Male, æt. 63. History: 18 months' malaise with excessive vomiting in the last weeks. On admission and till death there was intense substernal pain, and death occurred in an anginal attack. Red count 1,670,000 and colour index 0·9. P.M.—Apart from changes associated with pernicious anæmia there was very advanced calcareous degeneration of the coronary arteries.

Male, æt. 40. History: 4 years' malaise with pallor, dyspnœa and attacks of dyspnœa in the last two. The blood-count improved during the first three months from 960,000 reds, with a colour index of 1, to 3,420,000 and a colour index of 1·1. Patient was discharged to convalescence, but was readmitted with progressive anæmia a month later. There were now signs of involvement of the cord. An extensor response was constant, but the tendon reflexes were obtained. Sensation could not be tested owing to the mental instability present. The last blood-count showed 850,000 reds and 1560 white cells. Death occurred in coma. P.M.—The marrow was red and hypertrophied, and free iron was demonstrable in spleen, liver and kidneys.

Female, æt. 37. History of 2 years' anæmia and dyspnœa. The red count previously done showed 600,000 reds with some megaloblasts and a colour index of 1·6. Death occurred four hours after admission from œdema of the lungs. The spleen weighed 22 oz. The marrow in the bones was not examined, but no free iron could be demonstrated in liver or spleen.

All cases showed nucleated types of red cells.

(*b*) APLASTIC ANÆMIA.

4 cases, 1 fatal. The fatal case had been in hospital the previous year. A blood-count showed red cells 606,000, and the hæmoglobin less than 20 per cent. No nucleated reds were seen. One non-fatal case showed marked cord changes.

Female, æt. 56. History of indefinite malaise for one year. There had been progressive wasting and loss of power in the legs for 3 months, with mental confusion. On examination the patient was wasted and the skin was lemon-yellow in colour. There was marked spasticity of the legs, with loss of power. The tendon reflexes were difficult to obtain; the plantar response was extensor on both sides. Pain and tactile sense were lost below the right knee, and the left leg also showed diffuse sensory changes. Sphincter control was lost and there were bed-sores in the sacral region. A blood-count showed red cells 1,550,000, whites 2120, colour index 0·8. No nucleated red cells seen. An X ray showed no disease of spine. On discharge the lesion was progressive.

(*c*) CHLOROSIS.

2 cases. Both females, æt. 23 and 22. 1 case also had a double mitral lesion following chorea.

(*d*) SECONDARY ANÆMIA.

3 cases, 1 fatal. All in females. No cause was given in any case.

Female, æt. 8 *months.* A child with seven weeks' history of pallor and weakness, but no history of hæmorrhages. The child was markedly pale, œdema of the face was noted, and the spleen was just palpable. The blood-count showed 888,000 reds, with hæmoglobin under 20 per cent. The white cells numbered 13,480 with 80 per cent. small lymphocytes. One normoblast was seen. Death occurred within 24 hours and post-mortem examination showed the lesions of severe anæmia.

POLYCYTHÆMIA.

1 case in a *man, æt.* 30. The grandfather and father had been "high coloured" and the patient had noticed that he had a similar complexion. There was a history of 11 months' pain below the left costal margin, with some slight headache. The face was brick-red, the lips purple, the conjunctivæ constantly pink, and the hands appeared to be engorged with blood. The spleen was just palpable. The urine contained a trace of albumen, but renal function tests showed the kidneys to be efficient. The Wassermann was negative; the blood-pressure 115–90 mm. Hg. A blood-count gave 8,400,000 red cells with 150 per cent. hæmoglobin. The leucocytes numbered 5880. No change was obtained by treatment.

3. DIABETES MELLITUS.

30 cases with 4 deaths. Of the non-fatal cases the sexes were equally represented; 3 of the fatal cases were in males.

All the cases were treated by dieting; 22 cases had initial starvation varying from one to four days. The amount of sugar in the urine was determined in each case, and the blood-sugar was estimated in 20 cases. The highest value recorded was in a child æt. 6, who, admitted for pain in the region of the hip, was found to be passing 9·2 per cent. of sugar in the urine, with 0·81 per cent. sugar in the blood. Some slight improvement in this case was seen after dieting.

Complications noted were: Peripheral neuritis in 2 cases; paræsthesia without objective signs also in 4 cases. Optic atrophy 1; phthisis, 1; perforating ulcer, 1; xanthoma, 1; dementia, 1. As a result of treatment 15 cases were discharged with no glycosuria. 3 cases were readmitted the same year for further treatment.

Male, æt. 13. The patient had been healthy till three months previously, when he became incontinent at night. Fourteen days before admission there had been a sudden onset of acute abdominal pain, with vomiting and headache. The glycosuria was then discovered. The boy was not wasted and no abnormality was found on examination. The urine contained 0·9 per cent. sugar and 0·6 per cent. acetone. The measure was 32 oz. Starvation was carried out for 3 days: at the end of this traces of sugar were still present in the urine. Two months later he was discharged on a 15th day diet sugar-free. The blood-sugar, at first 0·132 per cent., was now 0·095 per cent. There was some account of an uncle who had been treated for diabetes at the age of 15 and who was now in middle life quite healthy.

Of the fatal cases 1 died from phthisis. This, a *woman, æt.* 40, had been under treatment for four years for diabetes. No special dietary had been given in the last twelve months. Cough was complained of during the last six weeks, and at post-mortem very extensive tuberculous broncho-pneumonia was found.

The other fatal cases died in coma, 2 whilst being starved, and 1 whilst on a modified diet.

2 cases of glycosuria were admitted during the year for investigation. Neither showed any increase in the blood-sugar content.

4. Diphtheria.

4 cases; 2 fatal. Of the non-fatal cases 1 had tracheotomy performed following intubation. Both cases were of laryngeal diphtheria, and membrane was also present in the fauces in 1. 1 fatal case died from broncho-pneumonia following tracheotomy. The other, a *male, æt.* 3 *months,* admitted with broncho-pneumonia and convalescent in 2 weeks. The child then developed cellulitis of the legs. At the end of 10 weeks a membranous tonsillitis developed; a swab examination revealed no diphtheria bacilli, but post-mortem 2 days later the membrane showed numerous bacilli.

5. Enteric Fever.

7 cases, none fatal; 5 in females. The infection was with the *B. typhosus* in 3 cases, *B. paratyphosus B* in 3 cases, and *B. paratyphosus C* in 1 case. The Widal test was performed in 6 cases, giving positive results; in the other case the *B. typhosus* was obtained on blood-culture. 1 other blood-culture done in the third week was negative. The urine and fæces were cultured in 5 cases with a positive result in 1. 1 case was admitted with hæmaturia.

Male, æt. 39. History of persistent headache and malaise for 3 weeks, with vomiting for 10 days and some cough. There was no abdominal pain or diarrhœa. Hæmaturia had been present for 4 days. The past history was negative except for an attack of gastritis whilst working in a T.N.T. factory. Patient had not been inoculated against typhoid. On examination temperature 102·6°, pulse 110, respirations 28. The tongue was heavily furred; the abdomen full. The spleen was palpable 2 in. below the costal margin, and the liver for the same distance. Some basal bronchitis was present. No rose spots were seen. The urine showed very marked hæmaturia; red cells and blood-casts were seen microscopically. The Widal was positive (*B. typhosus* $\frac{1}{400}$): blood culture was sterile. A leucopænia of 3400 cells was found. The urine and fæces were cultured on 2 occasions with negative results. Apart from a slight consolidation at one lung base there were no complications, and on discharge the urine showed no abnormality.

The only complication noted in the other cases was intestinal hæmorrhage in 1.

Female, æt. 17. *Paratyphoid C* infection. History of 14 days' headache, malaise and drowsiness, followed by sore throat and aching pains in the limbs in the last week. Vomiting had been present in the last 3 days. The onset was with diarrhœa, but on admission constipation was marked. On examination temperature 100°, pulse 76. There was slight injection of the fauces; no other signs were present. The stool was loose, but had no special characteristics. The Widal gave a $\frac{1}{40}$ dilution reaction to *Paratyphoid C.* This was confirmed 3 days later. No specific organism was found on cultivation of the urine and fæces. There were no complications. A case of pneumococcal septicæmia was admitted to the ward at this time and *B. paratyphosus C* was later isolated from the blood of the septicæmic case.

7. PYREXIA.

2 cases. 1, a student who had previously had malaria, was admitted for observation. No evidence of malarial infection was obtained. The other:

Male, æt. 20. No previous illness. History of 12 days' malaise and pain in the chest, with progressive irritability followed by a semi-comatose state. On examination temperature 104°, pulse 120. The temperature fell on the second day; there was pyrexia on the 3rd and 5th days, but no fever afterwards. Herpes were seen on the lips. The patient varied from a drowsy to a very irritable state. A double extensor plantar response was present; no other abnormal signs were found. Lumbar puncture showed a clear fluid, not under increased pressure and containing no abnormal constituent. The leucocyte count was normal; no malarial parasites were seen. On the 6th day, with a normal temperature, the plantar response was flexor. The spleen was now palpable. On discharge 3 weeks later there were no signs or symptoms.

9. GOUT.

3 cases—all males who had had previous attacks. The length of history varied between 7 and 10 years. In one case, æt. 38, who had had attacks from 10 years, no evidence of arterial degeneration was found. The other 2 showed marked arterio-sclerosis, with cardiac enlargement, high blood-pressure and albuminuria. The Wassermann was negative in both. The blood urea was found to be 44 mg. in 1 case tested. The other case complained of epigastric pain after food. A test meal in this case showed free HCl 0·14 per cent. and total HCl 0·18 per cent.

10. INFLUENZA.

21 cases, none fatal. All were cases of fever with mild catarrhal changes and tonsillitis. 17 cases occurred in house-men, nurses and students. An epidemic of influenza occurred in the last week in December. These are shown in 1922 report. No complications were noted in any of the 21 cases.

11. (*a*) MYELÆMIA.

4 cases, 1 fatal. The 3 non-fatal cases were each readmitted in the year. 1 of these died in the Infirmary after discharge.

Male, æt. 50. Admitted to hospital 1918, when blood-count showed 288,000 leucocytes. Readmitted 1920—leucocytes 440,000. Under treatment by benzol and X-ray exposures to the spleen the leucocytes on discharge in December were 13,200. The patient was discharged taking liq. arsenicalis. In January, 1921, the leucocytes were 7280; in February, 4300; April, 18,500; and in May, 51,900. Owing to this progressive increase patient was readmitted and given further X-ray treatment. On discharge in June the count was 80,000 and the spleen almost reached Poupart's ligament. In October further X-ray treatment was given, and the leucocytes were diminished from 80,000 to

5600; myelocytes, 8 per cent.; red cells, 4,500,000, with megaloblasts and normoblasts. 1 month after discharge the patient died—4 years from onset of symptoms.

Male, æt. 47. Symptoms—pain in left side for a month. The spleen was enlarged below the level of the umbilicus. The leucocytes numbered 95,000 and a month later 250,000, with 20 per cent. of myelocytes. Treatment consisted of radium exposures to spleen, benzol and arsenic. 12 months later the blood-count showed 5,400,000 red cells, 12,800 white and 4 per cent. myelocytes. The splenic enlargement was not markedly reduced.

Female, æt. 21. Onset indefinite. A history obtained of a brother who died from "a tumour of the spleen." Splenic enlargement in this case was markedly reduced by X-ray exposures and benzol. The spleen decreased in size from a level 2 in. above Poupart's ligament to 1 in. below the costal margin. The leucocytes at first numbered 300,000; 7 months later they were 49,500.

Female, æt. 35. In hospital 1919 as a case of myelæmia with a blood-count of 240,000 white cells, with 10 per cent. myelocytes. Treatment by courses of benzol, with X-ray exposures at intervals had been carried out till 3 weeks before admission. In 1920, after a normal labour, a living child was born. The patient was admitted with a week's history of tonsillitis. On examination temperature 103°, and pyrexia was continuous till death on the 11th day. There was marked follicular tonsillitis; culture showed no *B. diphtheriæ*. The liver was palpable 1 in. below the costal margin, and the spleen was felt at the level of the umbilicus. 4 days later purpuric spots appeared and were followed by extensive subcutaneous and cutaneous hæmorrhages. The blood-count showed red cells 2,200,000, white cells 240 and no myelocytes. The spleen rapidly decreased in size and hæmorrhages from the gums were marked. At the post-mortem, apart from the extensive hæmorrhages, the splenic enlargement and infarction, it was found that the shafts of the long bones were full of red marrow.

(*b*) LYMPHÆMIA.

2 cases; 1 possibly a case of lymphadenoma.

Male, æt. 60. History of attack of syncope 5 weeks previously, followed by malaise and asthenia. Slight hæmaturia had been noted for 10 days; there had been no other hæmorrhages. There was no fever. Pallor was very marked. The cervical, inguinal, axillary and epitrochlear glands were enlarged. The blood-count showed red cells 3,800,000, leucocytes 147,000, with 93 per cent. lymphocytes. The urine contained many red cells and some leucocytes. The spleen was enlarged below the level of the umbilicus. X-ray exposures to the spleen and arsenic caused some diminution in size of the spleen. On discharge hæmaturia was present.

Male, æt. 38. History of enlarged cervical glands since childhood, becoming more marked in the last two years. The patient was well nourished and did not appear anæmic. The cervical, axillary and inguinal glands showed moderate enlargement. The spleen was palpable 1 in. below the costal margin, the liver was not felt. The blood-count showed red cells 5,200,000, colour index 0·9, leucocytes 26,400, lymphocytes 57 per cent., eosinophils 0·5 per cent. Treatment consisted of X-ray exposure to the enlarged glands and arsenic. 3 weeks later a second count showed leucocytes 18,480, lymphocytes 76 per cent.

12. Lymphadenoma.

16 cases, 4 fatal. All the fatal cases and 9 of the non-fatal occurred in males. The age-incidence varied from 5–50 years.

Treatment.—Liquor arsenicalis in 7 cases, X ray 2 cases. Arsenic in salvarsan form was given in 3 cases, and 1 case also had benzol. Excision of isolated groups of enlarged glands was done twice, whilst two cases had excision of a gland for diagnostic purposes.

Blood-counts were done in 10 cases and showed no characteristic changes. Of the non-fatal cases, in 10 the cervical glands were enlarged, in 5 these were the only glands affected. The axillary glands were enlarged in 6 cases; once they were the only lesion. The inguinal glands were involved in combination with other groups 3 times. The spleen was palpable in 50 per cent. The mediastinal glands were enlarged in 1 case, and the abdominal glands palpable in another.

Half the cases showed some slight irregular fever. The Pel-Ebstein type was seen in one of the non-fatal and in 2 fatal cases.

Male, æt. 37. History of 5 months' enlargement of the inguinal glands, followed by enlargement of the cervical groups. Since the onset there had been marked epigastric pains and some irregular vomiting. On examination discrete enlarged glands were found in the situations named and also in the axilla. Examination of the alimentary and respiratory systems was negative. Fever in bouts of 5–9 days was charted. The blood-count showed no change, the urine was normal and the Wassermann was negative. A month later the air-entry at the left lung base was deficient. An X ray showed enlargement of the hilum glands. The spleen was now palpable and the patient became jaundiced, whilst the liver was felt enlarged. The patient had complained of constant abdominal pain in hospital, and vomiting was present from time to time. Mental changes became marked before death. At the post-mortem there was generalised glandular enlargement. A mass of enlarged glands was found in the region of the head of the pancreas. A large liver on microscopical section showed very marked lymphadenomatous infiltration.

13. Malaria.

3 cases. All benign-tertian in type. Infection contracted in India 1 year; East Indies 2 months, and Africa 5 years previously. All treated by quinine by mouth. Diagnosis confirmed by blood-film in each case.

14. Marasmus and Malnutrition.

20 cases with 7 deaths. Of the latter 6 were in males. Post-mortem examination was done in 4 cases.

Male, æt. 10 *weeks.* History of irregular feeding. The infant had vomited at intervals since birth. He was emaciated, weighing 7 lb. Apart from tendency to vomit after feeds no other abnormalities were discovered. In hospital weight was lost. Death occurred suddenly. At the post-mortem apart from appearances of marasmus an ulcer in the first part of the duodenum was found to have perforated. There was no peritonitis.

15. MEASLES.

5 cases. All transferred to fever hospital on diagnosis. 3 of these cases originally admitted with broncho-pneumonia, 1 with bronchitis and 1 admitted for convulsions. 1 case also had whooping-cough.

21. SCARLET FEVER.

1 case in a nurse admitted with tonsillitis. Rash appeared within 24 hours.

17. PURPURA.

3 cases. 1 case of purpura simplex. 1 case of purpura rheumatica.

Male, æt. 16. For several years the patient had had sudden attacks of abdominal pain with diarrhœa. No melæna had been noted. In the last year there had been an excessive tendency to bleed on slight trauma, and the tooth-brush caused bleeding from the gums. Attacks of syncope had occurred in the last 3 months. There was no family history of "bleeders," and no rheumatic history in the patient. He was admitted with a marked purpuric rash over the trunk and extensive bruising of the arms following pinching. There were no changes in the joints, and the spleen was not palpable. A blood-count showed 4,900,000 red cells with 8500 whites. The platelets numbered 10,000. Coagulation time was not estimated. Bruising could readily be induced in hospital with slight trauma, but excessive bleeding on wounding was not seen.

18. (*a*) ACUTE RHEUMATISM.

31 cases, none fatal. A history of previous attack of acute rheumatism was obtained in 3 cases; 1 case was readmitted. The treatment was by salicylates in all cases; 3 also had tonsillectomy performed in convalescence. Cardiac lesions were present in 19 cases; these comprised mitral regurgitation in 11 cases, stenosis and regurgitation in 4 cases and pericarditis in 4. Rheumatic nodules were not noted in any cases; erythematous rashes were present in 2 cases; epistaxis was noted twice. Pleurisy with effusion was present in 1 case.

Female, æt. 15. History of præcordial pains for 2 years, but no history of rheumatism. Joint pains in knees, ankles and wrists had started 24 hours previously. On examination there was fever, which persisted for 5 weeks. The knees, ankles and wrists were red and swollen. The heart-beat was diffuse in the 5th and 6th spaces, 3 in. from the mid-line; at the apex a systolic murmur replaced the first sound and was conducted into the axilla. A week later pericardial friction was audible and was followed by signs of pericardial effusion. At the end of a month a pleural rub was heard at the right base, followed by a dull percussion note and absence of breath-sounds and fremitus. Exploration of the chest yielded 10 c.c. of blood-stained fluid, which showed lymphocytes in excess and which was sterile on culture. The patient was discharged 5 months later with signs of mitral regurgitation, but no signs of pulmonary disease.

Acute rheumatism occurred in 2 members of the same family in boys æt. 11 and 14. The 1 gave a 5 days', the other a 3 days' history of joint pains and swellings. Both were admitted on the same day and the course of the disease was similar in each.

1 case was admitted to Surgical Side as a case of acute appendicitis.

Male, æt. 10. History of growing pains and recurrent sore throats for 1 year. Malaise for 3 weeks, and 1 week abdominal pain, vomiting, constipation, and some slight joint pains. On examination temperature 100°, pulse 100. The abdomen was distended, rigid and tender, most markedly so in the right iliac fossa. There was no evidence of joint swelling. At the laparotomy the peritoneum was injected and the gut distended. The appendix, which showed injection of the peritoneal coat only, was removed. The temperature did not settle completely after operation and joint pains persisted. Both reacted to salicylates. No cardiac enlargement or murmurs were determined, but the cardiac sounds were tic-tac in character. On discharge the pulse-rate persisted *circa* 100.

(*b*) SUBACUTE RHEUMATISM.

12 cases. 3 gave a previous history of acute rheumatism, and 6 others had had previous joint pains. In 3 cases no history of previous rheumatic manifestations was obtained. Rheumatic nodules were present in 1 case. 6 cases, on discharge, had no evident cardiac lesion. 4 were discharged with mitral regurgitation and 2 with double mitral disease. In 1 case hæmaturia was noted, for which no cause could be found. All treated with salicylates.

19. (*a*) RHEUMATOID ARTHRITIS.

10 cases, 7 in females. 1 case treated by excision of knee. The treatment in the others consisted of electro-therapeutics, radiant heat and various drugs.

CHRONIC RHEUMATISM.

2 cases of multiple arthritis which could not be classified clinically. 1 case was readmitted with pyelitis. Death occurred from septicæmia and no post-mortem was obtained.

20. RICKETS.

10 cases. These were all cases of active rickets and did not include deformities. All treated by cod-liver oil save 1. *Boy, æt.* 5 *years.*—Marked chest deformity, with rib beading and enlarged epiphyses. This child was treated on the balcony on ordinary hospital diet, without extra fat, and marked improvement was obtained in a month, when he had to be discharged owing to contracting scarlet fever.

22. SEPTICÆMIA.

3 cases, all fatal. 1 case followed furunculosis in a child of 5 months. Streptococci were grown from the pus from abscesses; a blood-culture was not done.

Female, æt. 10 *days.* History of onset of skin hæmorrhages on 8th day. Admitted very collapsed, with diffuse hæmorrhages into the palms of the hands, the buttocks and arms, and under the conjunctiva. The umbilicus appeared healthy, but at post-mortem the following day an ascending infection from the navel with abscesses in the liver was found.

Male, æt. 48. A case of leukæmia treated for several years. Onset of pneumonia 2 days before admission. The signs of septicæmia were always more marked than the local signs of consolidation of the lungs. The leucocyte count on admission was 19,560, with 46·5 per cent. lymphocytes. In the next 10 weeks counts showed 27,000 whites with 70 per cent., 38,000 with 84 per cent., and 38,000 with 69 per cent. lymphocytes. A pneumococcus was grown on blood culture and found on three further occasions in the next fortnight. A blood culture taken 2 days before death showed pneumococci, streptococci and *Paratyphosus C.*

23. Syphilis.

13 cases. Congenital syphilis 6 cases. 1 case included under tabes.

Female, æt. 10. No family history suggesting infection. The child had had a paralysis of the legs when 3 years old ; there was no history of rheumatism. She complained of 3 months' painless swelling of the knees and later the elbows, with præcordial pain on exertion. On admission the temperature was 100·4° and slight pyrexia was present for a week. There was effusion into both knees, movements at the elbows were limited, but there were no signs of inflammation of these joints. The liver was palpable 1 in. below the costal margin and tender. The spleen was not felt. The heart was not enlarged, but a rough systolic murmur was audible at the apex and conducted out to the axilla. The teeth were well shaped, the corneæ were clear ; there was no periostitis or other signs of congenital infection. A Wassermann was very strongly positive, and improvement was obtained by injections of N.A.B.

The other cases consisted of secondary syphilis 4 cases and tertiary syphilis 3 cases ; 1 of these latter showed a severe anæmia with marked leucopænia.

Female, æt. 33. As a child there had been repeated attacks of jaundice. She had always been pale and subject to attacks of syncope. Menstruation was only established in the 25th year. In the last 3 years ulceration of the legs had been present and had been treated by antisyphilitic measures. On examination the patient was emaciated and pale. Well-marked gummatous ulcers were seen on each leg. There were no signs in the nervous system. A harsh systolic aortic murmur was audible. The Wassermann was positive. A blood-count showed only 1,900,000 red cells, with 360 white cells. The differential count was not altered.

24. Tetanus.

1 case—fatal. History of abrasion of knee 15 days before admission. Stiffness of back first noted 10 days previously. Death occurred within 24 hours. The wound was examined post-mortem. No tetanus bacilli could be identified.

25. Generalised Tuberculosis.

3 cases, 2 fatal. These showed miliary tubercles of lungs and other solid viscera, with tuberculous meningitis. The non-fatal case, a child æt. 20 months, was admitted with a tuberculous dactylitis. Later abscesses appeared in the subcutaneous tissues of the face and scalp, and in the deep

muscles of the thigh. Before being taken home the child developed signs of intra-cranial tumour. The Wassermann reaction on 4 occasions was negative, the family history was good, and anti-syphilitic treatment did not modify the course of the disease.

31. VARIOUS GENERAL DISEASES.

(*a*) ANTHRAX.—2 cases in males. Both recovered after excision of pustule; 1 also had Sclavo's serum. The site of pustule on the right forearm in 1 case —a leather dresser—on the neck in the other, whose occupation is not given.

(*b*) ACTINOMYCOSIS.—2 cases in males. In 1 the jaw was infected. He had previously been treated in hospital on 5 occasions in 1920 by infiltration with 4 per cent. formalin. The other:

Male, æt. 49. History of sinus of chest-wall following an abscess. Cough, dyspnœa and pain in the right side had been present for 6 years. An examination of the sputum in Out-Patients had shown a streptothrix. This was not confirmed in hospital. The signs were those of a massive consolidation of the whole right lung with the exception of the extreme apex. 3 sinuses discharging pus were present over the right chest in front. The fingers were clubbed. X ray showed uniform opacity of the right lung. Treatment was by X-ray exposures to the chest and the giving of nascent iodine. Some general improvement was obtained, but the lung condition was unaltered on discharge.

(*c*) GLANDERS.—1 fatal case. A *male, æt.* 27, who gave a history of chronic suppuration from multiple sinuses for 6 months. Chronic abscesses were present in jaw and left foot, with some smaller abscesses over the back and in the arms. Pus from these was sterile. Death occurred from a wide-spread broncho-pneumonia, and from the lungs *B. mallei* were cultured. The patient, a Maori, had been in charge of horses throughout the war.

(*d*) SCURVY.—2 cases, 1 in male æt. 11 months, the other in female æt. 9 months. Both babies had been fed on Allenburys' food and had had no fresh fruit. Hæmorrhages over the lower end of the femur and in the gums were noted in both. 1 also had hæmaturia. Decitrated lemon-juice and fresh orange-juice were used in the treatment. No symptoms were noted after 1 week.

(*e*) OBESITY.—2 cases, 1 diagnosed as adiposis dolorosa.

(*f*) PELLAGRA.—1 fatal case. A *woman, æt.* 45, with a previous history of gastric ulcer, for which a gastro-enterostomy had been performed 10 years ago. It was not possible to obtain a history of the diet. In the last 6 months she had complained of asthenia, vertigo and diarrhœa, with mental depression and anxiety. A rash on the hands had been present for a month. The patient was a thin woman, irritable on examination and melancholic in outlook. There was extreme lassitude from time to time, and insomnia was marked. Over the dorsum of the hands the skin was hard and desquamating, and gave a sunburnt appearance; the face and feet were not affected. She complained of abdominal pain. Vomiting was present at first, and the stools were loose, the bowels being opened 5 or 6 times daily. On examination the tongue was dry and glazed; no other abnormality was found in the alimentary system, nor were changes in the nervous system detectable. A blood-count was normal, the Wassermann reaction negative, and the basal metabolic rate not altered. There was progressive exhaustion, pyuria was present, and death occurred 6 weeks later from ascending urinary infection.

DISEASES OF RESPIRATORY SYSTEM.

35. Bronchitis.

44 cases, 1 fatal.

The chest was X-rayed 7 times; sputum negative for Tb. in 5 cases. Hæmoptysis noted as initial symptom 3 times. An asthmatic element was present in 3 cases. 1 sputum on culture gave a pure growth of pneumococci.

The fatal case was in a *male, æt.* 57, with a long history of winter cough. Death occurred from cardiac failure on the second day.

36. Broncho-Pneumonia.

70 cases, 18 fatal. Of these 8 were in infants under 1 year.

6 cases showed delayed resolution and 2 were discharged with fibrosis of lung. 4 cases were re-admitted the same year with a further attack. Pericarditis was simulated in 2 cases, and meningitis in 1.

Of the fatal cases empyemata were noted twice at post-mortem and pericarditis once. 1 case had a suppurative parotitis as a terminal event. 1 death occurred in a Mongol. 2 cases had severe laryngeal obstruction and were admitted as cases of diphtheria. Swabs were returned as negative, and post-mortem the cause of death was given as broncho-pneumonia.

37. Pneumonia.

62 cases, 13 fatal—of these 8 were in males.

Complications in fatal cases were: Empyema and peritonitis, 1; diabetes and ulcerative endocarditis, 1; meningitis, 1; aortic disease, 1. Of the non-fatal cases complications were diabetes, 1; femoral thrombosis, 1; otitis media, 1; and pleural effusion, 3 (excluding empyema).

Of the non-fatal cases: Resolution was delayed in 5 cases; resolution by lysis was noted in 4, and by crisis on an estimated day of illness in 36 cases. The crisis occurred on the 6th day in 7 cases, on the 7th day in 9 cases, on the 8th day in 7, on the 9th day in 9 and on the 10th day in 4.

The situation of the consolidation was not given in 3 cases. The right base was involved 12 times, the left 11; the whole lung 5 times on the right side and twice on the left. The right middle and lower is noted affected in 5 cases. Both bases were solid 3 times. The right apex was consolidated in 7 cases and the left apex once.

In the fatal cases the right apex was involved in 4, the right middle and lower in 3, the right base in 1, and the whole of the right lung in 2 cases; whilst both lower lobes were involved in 2 cases and the whole left lung in one.

38. Bronchiectasis.

2 cases, both in males. 1 fatal, but no post-mortem obtained. The other, a *man, æt.* 19, gave a history of cough following pneumonia in the convales-

cence from appendicectomy 12 months previously. There were well-marked signs of cavitation at the left base, with copious foul sputum, clubbing of the fingers and irregular fever. The sputum contained no tubercle bacilli. A vaccine prepared from the sputum appeared to afford some relief.

39. PULMONARY TUBERCULOSIS.

81 cases with 8 fatal cases.

At post-mortem 1 case showed a massive empyema and 1 a pneumothorax. Amyloid change was found in only 1 case and tuberculous enteritis in 1. 1 case died before admission to ward following a very severe hæmoptysis in Casualty.

Male, æt. 58. A case admitted to surgical side with a history of lower abdominal pain, with blood and mucus in the stools for a period of 6 months. A laparotomy was performed and nothing abnormal found. Following the operation there was a persistent cough, with irregular pyrexia. TB. were found in the sputum, and death occurred 5 weeks later.

Of the non-fatal cases complications were: Pleural effusion, 2; laryngitis, 2; renal tuberculosis, 1; tuberculous arthritis, 2; Vincent's angina, 1; epididymitis, 1; amyloid disease, 1; and functional wrist-drop, 1. 2 cases had treatment by giving an artificial pneumothorax after stripping the parietal pleura from chest-wall.

Female, æt. 4. A child who had active disease at both apices, with tuberculous peritonitis. The cough had persisted since an attack of broncho-pneumonia a year previously. Tubercle bacilli were found in the sputum, but the Von Pirquet reaction was negative.

Female, æt. 36, with advanced active disease, the onset of the infection being 8 years before. The patient was pregnant *circa* 5 months. The pregnancy was allowed to proceed and a 7½ months living child was born. The mother was discharged to a home for the dying. The child appeared healthy 1 month later.

Male, æt. 18, gave a history of having been treated for phthisis for a year. He was admitted with a week's history of œdema of the feet. On examination active disease of the right apex was found. There was œdema of the legs. The urine showed a heavy cloud of albumen. Renal tests showed a good concentration power and a blood urea content of 28 mg. Diarrhœa in hospital was marked. On discharge œdema was not marked, but the albuminuria was unchanged.

40. PLEURISY.

38 cases, none fatal. 21 of these cases had effusion, for which aspiration was performed in 12. The fluid was in the right chest in 15 cases and in the left in 6. The fluid removed was examined in all cases. Small lymphocytes were present in 8 cases, degenerated polymorphs and lymphocytes in 2. The fluid was inoculated into guinea-pigs twice, once with positive result, for tuberculosis.

Pleural crepitus was present on the left in 4 cases and on the right in 13 where no exudate was present.

Female, æt. 25. A case of pleural effusion with *Staphylococcus aureus* grown on culture. Admitted with a 14 days' history of unproductive cough and pain in the left chest. The temperature, 101°, settled by the third day. There were signs of effusion at the left base up to the level of the scapular spine. Exploration of the chest gave a clear fluid, which contained polymorphonuclears, and the organism was grown on culture. Recovery was complete at end of one month.

Male, æt. 41. A history of 18 months' chest pain, with 3 previous aspirations of the pleural cavity. He complained of dyspnœa, but only slight cough. There had been no marked loss of weight or night sweats. On admission there was no fever. The signs were those of a massive effusion into the left pleura. 2 aspirations of 30 and 20 oz. were done. The fluid contained much altered blood. The chest was opened; the lung was found collapsed and the pleura somewhat thickened. A portion of this, on section, was diagnosed as endothelioma.

41. EMPYEMA.

26 cases with 3 deaths.

Of the non-fatal cases all had rib resection and drainage except 4. 1 had aspiration of a tuberculous empyema, 2 had thoracoplasty for old empyema, and the 4th, an old tuberculous empyema with open pneumothorax, was treated medically.

In the cases with rib resection the empyema was on the left side in 10 and on the right in 9. Pneumococci were cultured from the pus in 11 cases, a Gram-positive coccus in 3, a streptococcus in 1, and in 1 other culture was negative.

Of the fatal cases 1 was in a child with signs of effusion at the right base. The general condition was weak; pleural puncture was performed and pus was withdrawn. At the post-mortem next day both pleural cavities and the pericardial sac contained pus.

Male, æt. 36. A case where rib resection for empyema had been followed by decortication of lung 3 years previously. A sinus had persisted. 2 thoracoplasty operations were done in hospital a month before death. At post-mortem very advanced lardaceous disease was present.

42. PNEUMOTHORAX.

3 cases, none fatal. 2 cases showed tubercle bacilli in the sputum. One case, a tuberculous pyo-pneumothorax, had resection of rib following 2 aspirations. The other 2 had balcony treatment.

43. MEDIASTINAL GROWTH AND GROWTH OF LUNG.

15 cases, 7 fatal.

The situation of the growth given as left apex 2, left base 2, right base 2, and right hilum in 2 cases. 1 case was thought to follow removal of epithelioma of cheek. The chest was aspirated in 1 case; œsophagoscopy showed a tumour distorting the hilum in 1 case. 1 case was treated by X-ray exposures to chest.

The symptoms were progressive in all on discharge.

Of the fatal cases 2 had empyemata—1 of these was drained following resection of rib. 2 others had septic broncho-pneumonia. Microscopically 3 cases were returned as lymphosarcoma and 1 as spheroidal-celled carcinoma.

44. RESPIRATORY, VARIOUS.

(*a*) FIBROSIS OF LUNG—8 cases, none fatal. Right and left lungs involved in 4 cases each. 1 case also had a small pleural effusion, and 1 case had mitral disease following rheumatism. 5 cases were attributed to attacks of pneumonia 2–12 years previously; 1 case had had symptoms following operation for empyema.

(*b*) ABSCESS AND GANGRENE OF LUNG.—2 cases, 1 fatal case of gangrene.

Male, æt. 56. History: 6 months previously a small piece of bone was swallowed. There was some cough following this, and then the patient was free from symptoms till 8 weeks before admission, when he complained of cough, dyspnœa and copious expectoration. 3 days previously he had coughed up a small piece of bone, $\frac{3}{4}$ in. by $\frac{1}{2}$ in.

On admission there was no fever; sputum was copious, muco-purulent, but not fœtid. The fingers were clubbed and there were signs of cavitation at the left base. He was discharged 3 months later with slight cough only and no expectoration.

(*c*) ASTHMA.—5 cases, none fatal. 3 in males. All treated by iodides and stramonium. Amyl nitrite effective in 1 case. All had had previous attacks save 1.

(*d*) WHOOPING-COUGH.—4 cases, none fatal. 1 child admitted with convulsions; 1 admitted with endocarditis. All discharged on diagnosis.

DISEASES OF CARDIO-VASCULAR SYSTEM.

45. THORACIC ANEURYSM.

13 cases, 4 fatal. 1 case in a woman.

All given iodides. 1 case treated by intravenous injection of novo-arsenobouillon. The Wassermann reaction was positive in 6 non-fatal cases and in all the fatals. A negative reaction was obtained twice. 2 patients admitted infection 30 and 31 years previously; the others denied syphilis. Two of the non-fatal cases had pleural effusions confirmed by exploration; 1 other had partial collapse of the left base.

Of the fatal cases 2 died of cardiac failure; death followed hæmatemesis —rupture into the œsophagus—in 1, and in the other rupture had occurred into the left bronchus. The site of aneurysm was given as the arch in 5, the descending aorta in 3, the ascending aorta in 2, the arch and descending aorta in 1, and the arch and innominate artery in 1 case.

ANEURYSM, VARIOUS.—4 cases, 1 fatal.

1 of right femoral artery and 1 of popliteal, both treated by excision. 1 fusiform aneurysm of abdominal aorta confirmed at laparotomy.

Female, æt. 35. History: Several months' attacks of violent epigastric pain, with indefinite relation to food, but relieved by vomiting. The last attack had started 2 days before admission. On examination the temperature was 101 and the pulse 120. There was marked rigidity and tenderness in the right hypochondrium, with a doubtful mass palpable. The following day, following an attack of intense pain, the patient collapsed and died within a few minutes. Post-mortem: An aneurysm of the superior mesenteric artery had ruptured and the peritoneum was flooded with blood. There was no evidence of disease of blood-vessels elsewhere.

46. AORTIC DISEASE.

16 cases, 3 fatal. 1 case only in a female. She gave a 4 plus positive Wassermann reaction. Of the non-fatals a history of rheumatic fever in 3, syphilis was admitted in 3, 2 others gave a positive Wassermann and 1 man had tabes. The Wassermann was negative in 6 cases. 2 patients had had attacks of gout. 5 complained of anginal attacks.

Of the fatal cases the Wassermann reaction was positive in 2. The other case died within a few hours of admission. Post-mortem obtained in 2 cases. 1 showed recent terminal pericarditis.

47. ARTERIO-SCLEROSIS.

5 cases with 1 death.

Of the non-fatal cases 2 had anginal attacks and 1 complained of abdominal pain. 1 case developed a right hemiplegia under observation.

The fatal case had had an innominate aneurysm ligatured in 1918 in hospital. Death occurred from pneumonia. Post-mortem the site of ligature of the innominate was visible; the lumen of the vessel was patent.

48. MALIGNANT ENDOCARDITIS.

8 cases, all fatal. 1 case in a female.

Blood cultures were done in 5 cases; 1 was returned as sterile, 4 others gave a growth of streptococci. All cases had irregular fever save 1, who was afebrile the whole period. In 1 case death was due to a terminal cerebral hæmorrhage; another case showed thrombosis of the central vein of both retinæ. 1 case was in a patient with congenital heart disease, and 1 showed signs of adhesive pericarditis.

RHEUMATIC ENDOCARDITIS.

16 cases, 1 fatal.

All gave a history of rheumatic fever or joint pains in the past. The cardiac lesion was mitral regurgitation in 8 cases, double mitral disease in 6 cases and mitral and aortic disease in 2 cases. 1 child also had signs of adherent pericardium and 3 patients showed rheumatic nodules. A tendency to chorea was noted twice. Tonsillectomy was performed in 1 case.

Boy, æt. 5. History of joint pains for 1 month before admission. On examination there was some cardiac enlargement and a double mitral murmur was present. Progress was noted in the first 9 weeks, and then within 48 hours there were signs of acute cardiac failure, with rapid increase of the A.C.D. and enlargement of the liver to the level of the umbilicus. Post-mortem the valvular disease was confirmed and there was recent pericarditis with effusion.

50. MITRAL DISEASE.

39 cases, 12 in men. 4 fatal cases, 3 in women.

Of the non-fatal cases double mitral disease was present in 25, whilst 7 were shown as mitral stenosis. A history of acute rheumatism was given by 22 patients; 6 had had other rheumatic manifestations, *e.g.* chorea. In 7 cases no history of rheumatism could be obtained. Of these cases 14 had auricular fibrillation. This condition was present in all the 14 patients on discharge.

Of the fatal cases a history of rheumatism was obtained in 3. Fibrillation was noted in 1 case. 1 case at post-mortem showed a confluent bronchopneumonia. 1 death followed the termination of an 8 months' pregnancy.

51. MITRAL AND AORTIC DISEASE.

11 cases, 2 fatal.

Of the non-fatal cases a "rheumatic history" was obtained in 7.

1 case, where a history of acute rheumatism was obtained, had an old left hemiplegia; the Wassermann in this case and in the 1 other was positive. 1 case was fibrillating.

Of the fatal cases rheumatism was present in 1. Post-mortem 1 case showed adhesive pericarditis.

52. MYOCARDITIS.

8 cases, 3 deaths.

Of the non-fatal cases 1 had paraplegia, another showed partial heart-block. The Wassermann was negative in 2 cases; the others were not tested.

In the fatal cases 1 man had a right-sided pleural effusion, which was aspirated twice. This case showed heart-block, confirmed by electro-cardiograph. Another case was fibrillating, and the third, a woman, was diagnosed as fatty myocarditis and the diagnosis confirmed post-mortem.

53. PERICARDITIS.

6 cases, 1 fatal.

Of these 3 were diagnosed as adherent pericardium, 2 as pericarditis with effusion, and in 1 case pericardial friction was heard, but no evidence of effusion was present. In every case a history of acute rheumatism was obtained; 2 cases had also had chorea. No case showed rheumatic nodules.

Male, æt. 18. History of rheumatic fever æt. 6, followed by chorea and treated at intervals for cardiac trouble. A recent history of joint pains and præcordial pains also given. On examination there was slight fever. The pulse was 116 and collapsing in type. Cyanosis was marked. The apex was in the 7th space, 6 in. from the mid-line. Systolic retraction was present. The A.C.D. extended 2 in. to the right of the sternal edge. The left lung base was collapsed; elsewhere the lungs were full of moist *râles*. The cardiac sounds were replaced by a very harsh systolic murmur followed by a softer diastolic. The liver was enlarged 2 in. below the R.C.M. There was no œdema of the legs and no ascites. Death occurred 5 days later. Post-mortem adhesive pericarditis was noted, and after blood-clot had been removed the heart weighed 49 oz.

57. CONGENITAL HEART DISEASE.

5 cases, none fatal. 3 cases in children.

Systolic murmur and thrill noted in all cases. Blood-count in 2 cases showed 8,000,000 red cells.

Male, æt. 42. No history of rheumatism. The man knew that a congenital cardiac lesion had been diagnosed as a child, but this had caused no disability till the age of 39. In the last 3 years he has complained of dyspnœa on exertion, with anginal pains, and sweating after the attacks confined to the left side of the trunk. On examination there was some clubbing of the fingers. No cyanosis or œdema. The A.C.D. extended to the right sternal edge and up to the 2nd space. A harsh systolic murmur was heard at the base, most marked at the pulmonary area, and accompanied by a basal systolic thrill. In the 3rd left space, at the sternal edge, a second murmur—a soft continuous humming sound—was audible. The B.P. was 120 systolic and 60 diastolic. The pulse was regular. Præcordial pain was improved by rest for 1 month in hospital.

58. CIRCULATORY, VARIOUS.

(*a*) AURICULAR FIBRILLATION.—6 cases, none fatal. 15 cases also entered under mitral disease. 1 case showed a right hemiplegia from cerebral embolism. All relieved but none cured on discharge.

(*b*) TACHYCARDIA.—2 cases of paroxysmal tachycardia, both in men. 1 case was said to have followed influenza 2 years previously. The attacks lasted 36–48 hours, and the onset and termination was abrupt. The diagnosis was confirmed by electro-cardiogram. The other case had a history of 6 weeks only. Here the attacks occurred only at night in bed and lasted 30 minutes.

2 cases of tachycardia in women diagnosed as functional. 1 woman had had hemithyroidectomy in 1914 in hospital. The gland had showed adenomatous changes only. The basal metabolism in this case was given as + 25·1 per cent.

(*c*) HEART BLOCK.—2 cases, neither fatal. *See also* Myocarditis.

The Wassermann was negative in both. Electro-cardiogram showed partial block in 1 and complete in the other (rate 26 at apex). The former had intense anginal attacks and the latter had no pain, but complained of dyspnœa on exertion.

(*d*) VARIOUS.—1 case of intermittent claudication in a woman, æt. 35. History of pain and coldness of feet with pallor noted in last 3 winters. The fingers have never been involved. On admission the right posterior tibial could not be felt pulsating. Improvement obtained by electrical treatment. 1 case of vaso-motor neurosis admitted to surgical ward as a case of cervical rib.

DISEASES OF DIGESTIVE SYSTEM.

67. STOMACH.

(*a*) GASTRIC ULCER.—61 cases, 5 fatal. Of the non-fatals 18 were in men and 37 in females. Of the fatals 3 were in men.

Non-fatal cases: 20 were treated by medical means, *i. e.* diet, alkalis, etc. 14 cases had gastro-enterostomy performed, and the ulcer was excised in a further 13, and cauterised in 1 other. 3 cases admitted with hæmatemesis were treated by morphia and rectal alimentation, followed by diet. 4 cases of old gastric ulcer were admitted for bismuth-meal examination only, and 1 case refused investigation and treatment and was discharged.

Test-meals recorded in 20 cases gave average findings of free hydrochloric acid 0·150, combined acid 0·076 and total acid 0·226. 2 cases showed no free acid ; in both these at laparotomy the scars of ulcers were found.

Bismuth meals are recorded in 30 cases.

Male, æt. 43. History of 3 attacks of slight dyspepsia in the last 10 years. Some loss of weight in the previous 6 months, and 1 month's almost constant epigastric pain with very occasional vomiting, but no hæmatemesis. On admission patient was ill-nourished ; a small, non-tender mass was palpable in the left epigastrium. The X ray showed no evidence of growth. A test-meal showed 0·057 per cent. free acid and 0·08 per cent. combined acid, with a doubtful lactic acid reaction. Blood was found in the stomach contents and occult blood in the fæces. At laparotomy the condition found was thought to represent a growth at the cardia. Patient's condition did not warrant further interference till 5 weeks later, when a supposed carcinomatous ulcer adherent to the pancreas was excised. Convalescence was delayed by hæmorrhage and sepsis, but on discharge 5 months later the man was taking full diet with no symptoms. The ulcer microscopically showed no evidence of malignancy.

Of the fatal cases 1 died from post-anæsthetic pneumonia following gastro-enterostomy ; 1 case died under the anæsthetic from asphyxia caused by the vomiting of a bismuth meal. 1 case died from post-operative shock, but no post-mortem was allowed. A further case died 48 hours after gastrectomy : at the post-mortem the gastric mucosa was congested : no other site of hæmorrhage could be identified. The last case died from repeated hæmatemesis—in 1 week in hospital the patient vomited 82 oz. of blood. At post-mortem a chronic ulcer, bound down to the pancreas, was found. A vessel was found perforated at the base of this.

(*b*) CARCINOMA.—50 cases, 17 fatal. These include 1 case of sarcoma of stomach. The treatment consisted of : Gastro-enterostomy 18 cases, partial gastrectomy 4 cases, partial gastrectomy with gastro-enterostomy 3 cases. In 2 gastrostomy was performed and jejunostomy in 2. A colostomy for secondary deposits was done in 1 case, and an abscess was drained in a case of suppurating secondary growth in the liver. Laparotomy was performed in 6 of the other cases, where the condition found at operation did not allow of further operative treatment.

The age-incidence varied in the non-fatal cases from 41–76 years. Men were twice as numerous as women—22 to 11 in the non-fatal, and 12 men died and 5 women. The youngest case was that of a man æt. 39.

In 34 cases where the situation of the growth was stated at operation the pylorus was involved in 24 cases, the cardiac end of the stomach in 6, the whole stomach was invaded in 2 cases, and the body in 2.

Of the non-fatal cases test-meals were done in 16 cases. In 6 of these cases where the diagnosis was not confirmed by operation no free HCl acid with presence of lactic acid was returned in 5 cases. 1 case showed 0·073 per cent. free acid with no lactic acid. In 10 cases the diagnosis was confirmed by inspection at laparotomy. In 8 of these the test-meals showed lactic acid and no free hydrochloric. In 2 others free acid was present. 1 of these gave readings of 0·131 per cent. free HCl with total acidity 0·189 per cent. A portion of growth was removed in this case and found to be a colloid carcinoma.

Of the fatal cases test-meals were done in 8. 4 showed no free acid with lactic acid present; 1 showed no free acid—lactic acid not tested for; 1 showed lactic acid with traces of free acid. In 2 cases in which the diagnosis was confirmed by inspection at operation and post-mortem examination, test-meals showed 0·135 per cent. free HCl and 0·248 per cent. total HCl, and 0·147 per cent. free and 0·203 per cent. total HCl respectively.

In the fatal cases symptoms had been present in a majority of cases for 6 months: 2 cases had had indigestion for a period of 2 years.

Complications noted in the fatal cases were: Femoral thrombosis in 1, parotitis in 1. 2 cases had hæmatemesis, and a history of hæmatemesis was obtained in 2 of the non-fatal cases.

The cause of death was exhaustion in 6 cases—3 of these had had surgical treatment—hæmatemesis in 2 cases, general peritonitis following operation in 3 cases, shock in 2 cases. 1 case died from abscess of right lung, and 2 from post-anæsthetic broncho-pneumonia. The other case died from septicæmia following a suppurating secondary growth of the liver.

Sarcoma of stomach.—Male, æt. 66. History of 7 months' epigastric pain, bearing no relation to food. Vomiting had been irregular in the last 3 weeks; no hæmatemesis or melæna noted. The patient was emaciated, the skin was pigmented. Epigastric tenderness was the only sign elicited. The test-meal showed no free hydrochloric acid, and lactic acid was present. X ray showed a persistent defect in the greater curvature. At operation a large mass was invading the posterior wall of the stomach. A nodule of this was removed, and on section proved to be a spindle-celled sarcoma.

(*c*) DILATATION OF STOMACH.—1 case diagnosed as dilatation of stomach and duodenum from mesenteric traction. The history was that of attacks of epigastric pain and vomiting at intervals for 30 years. The patient was very well nourished. A test-meal gave 0·281 per cent. free acid and a total acidity of 0·37 per cent. An X ray showed a hypertonic stomach, low in position. At laparotomy the stomach and first and second part of duodenum were very dilated. No other structural change was observed. Duodeno-jejunostomy was performed.

(*d*) CONGENITAL PYLORIC STENOSIS.—3 cases in males. All fatal following Rammstedt's operation. 2 cases died from diarrhœa, 1 two days, the other ten days after operation. The third case died from shock within 5 hours of operation.

(*e*) VARIOUS: GASTRITIS.—4 cases in males, 1 fatal, the fatal case in a man who gave a 2 months' history of pain after meals and vomiting. At operation the stomach was found normal; a gastro-jejunostomy was performed and death occurred a week later from pneumonia. The stomach and duodenum appeared normal at post-mortem; the condition of the liver confirmed an alcoholic history.

GASTRO-JEJUNAL ULCER.—1 case following gastro-enterostomy for duodenal ulcer performed in 1917. Treatment by excision of gastro-jejunal ulcer with closure of stomach and jejunum. A fortnight later partial gastrectomy was performed.

JEJUNAL ULCER.—1 case. Original gastro-enterostomy in 1917 for pyloric ulcer. In 1920 occlusion of pylorus. Treatment by excision of ulcer.

PYLORIC STENOSIS.—From various causes 6 cases; none were fatal. 2 cases refused operation. 1 case of fibrous stricture following corrosive poisoning noted. The other 3 cases at laparotomy showed the stenosis to be due to chronic inflammation and perigastric adhesions. Posterior gastro-enterostomy performed in these 4 cases.

68. DUODENAL ULCER.

48 cases; 5 fatal—all in males.

Of non-fatal cases, 39 in men, 4 in women. 23 cases were treated by gastro-enterostomy and 19 by medical means, the latter including 2 cases admitted with severe hæmatemesis, who were treated by rectal alimentation and morphia followed by diet and alkalis. Laparotomy was done in 1 case; universal adhesions prevented further treatment by gastro-enterostomy. 2 of the cases treated medically had had previous gastro-enterostomy performed. 1 case occurred in a tabetic; 1 man was suffering from lateral sclerosis. 1 case was re-admitted for volvulus of sigmoid.

In 10 recorded test-meals, where the diagnosis was confirmed at operation, free hydrochloric was given as 0·265 per cent. and total acidity as 0·359 per cent. (average). Bismuth meals were given in 20 cases.

Of the fatal cases 2 died from hæmatemesis. The other 3 had had operative treatment. Of these 1 died from general peritonitis, 1 died of exhaustion following a second operation of entero-enterostomy done for regurgitant vomiting after previous gastro-enterostomy, and the third case was that of a *man, æt.* 38, who gave a history of epigastric pain for 18 months. At operation a duodenal ulcer was found. A Mayo Polya pylorectomy was performed. Death occurred 24 hours later. At the post-mortem extensive hæmorrhage had occurred from a small, apparently recent ulcer immediately to the gastric side of the suture-line. This was thought to result from pressure of the clamp used at operation.

69. HÆMATEMESIS.

14 cases, none fatal. 11 of these occurred in patients who gave a history suggestive of ulcer, but in whom the diagnosis could not be given with accuracy. 2 cases occurred in alcoholic subjects and probably resulted from cirrhosis.

Male, æt. 23. A history of tendency to bleed was recorded, but no family history of hæmophilia could be obtained. He had previously attended hospital for hæmaturia, the cause of which was not discovered. 5 days before admission a moderately severe hæmatemesis had occurred. No other gastric history was obtained. Apart from marked blanching of the skin no signs were noted in hospital, and on discharge the patient had no symptoms.

MELÆNA.—2 cases; both recovered. Both gave a history of pain after food. A laparotomy in 1 case showed no cause for the bleeding.

74. COLITIS.

21 cases; none fatal.

5 cases in children. Mucus noted in all. Blood noted twice. 1 case had anæsthetic before diagnosis from intussusception could be made. 2 had stools examined for dysenteric infection with negative results.

In adults 5 cases were diagnosed as "mucous colitis." Bismuth meals were done in 2 of these. 1 showed a spastic condition of the descending colon, the other extreme hypermobility—the meal appearing in the rectum within 6½ hours. 5 patients gave a history of previous dysentery. Examination of fæces for dysenteric infection done in 7 cases. Sigmoidoscopy performed twice.

Male, æt. 26. A history of diarrhœa since 1917. Blood and mucus noted in stools for 5 months. He complained of slight abdominal pains and marked tenesmus. No history of dysentery was obtained. On examination there was no marked wasting and no abdominal tenderness. The spleen was just palpable. The stools consisted of pus, *debris* and blood. On culture streptococci were obtained. The Wassermann was negative. Sigmoidoscopy revealed a grossly ulcerated colon. The condition varied from time to time, and no treatment by antiseptics or by irrigation secured any permanent benefit. On discharge the patient was instructed to use a daily irrigation through a cæcostomy performed in hospital.

80. CONSTIPATION.

15 cases. 2 were examined under an anæsthetic, 2 had negative bismuth meal examinations. All improved on aperients except 1, where the facies, obesity and slight mental dulness and persistent subnormal temperature suggested hypothyroidism. This case improved on thyroid medication.

81. DYSENTERY.

4 cases. Of these 2 were amœbic—examination of stools was positive. Both cases treated by emetine bismuth iodide; 1 also received injection of emetine. Another case showed lamblia infection only and recovered on saline treatment. The other case was one of chronic diarrhœa following an amœbic dysentery 3 years previously—no *histolytica* cysts could be found, and the condition improved on dieting.

SPRUE.—1 case—fatal. 1 other case admitted for observation; no disease found.

Female, æt. 37. History of dysentery in India 15 years previously. In good health till 12 months previously, when "foaming grey" stools were noted and the mouth became sore and ulcerated. Abdominal distension and cardiac attacks were present. On examination there was extreme wasting, with a few small buccal ulcers. The stools were bulky, offensive and grey-greeny in appearance. On culture of these staphylococci and streptococci were grown; no cysts were seen. The total fat in fæces was 17·28 per cent., with neutral fat 7·8 per cent. The urinary diastase was given as 40. Treatment consisted of modified diet with restriction of fats. The wasting was progressive, till immediately before death the weight was only 3 st. 9 lb. No post-mortem was allowed.

1 case of CŒLIAC DISEASE, which improved on treatment. 1 case of DIARRHŒA of unexplained origin.

VOMITING.—4 cases admitted for observation and no cause discovered. 6 cases of cyclic vomiting in children, 1 case of FUNCTIONAL VOMITING, and 1 case thought to be an occupational disease—the patient was a shellac varnisher.

82. DYSPEPSIA.

31 cases, 1 fatal.

The diagnosis was made in patients who gave a history of abdominal pain related to food and usually accompanied by vomiting, and in whom the results of special investigation in hospital did not lead to a more complete diagnosis. Test-meals were done in 23 cases and bismuth meals given in 22. 2 cases had had previous laparotomy performed ; 2 other cases had laparotomy in hospital with negative findings.

Male, æt. 54. History of 4 years' flatulence and vague epigastric discomfort. For 6 weeks pain shortly after meals and accompanied by vomiting with loss of weight were noted. No history of hæmatemesis or melæna was given. On examination there was some epigastric tenderness. The test-meal showed 0·172 free acid and 0·285 per cent. total acid. The bismuth meal showed very active gastric peristalsis with a persistent duodenal shadow. At operation a few adhesions were found near the pylorus, but no evidence of ulcer. A gastro-enterostomy was performed. Death occurred a week later from post-anæsthetic pneumonia. Post-mortem examination showed no cause for the pain, and sections of the duodenum showed no evidence of inflammation or ulceration.

83. DYSPHAGIA.

5 cases, none fatal. Œsophagoscopy done in 4 cases. In 2 cases no abnormality was noted, in 1 the condition of achalazia was diagnoased, and in another there was obstruction at the level of the cricoid, suggesting early growth—operation was refused in this case. The others, on discharge, were improved.

84. GASTRO-ENTERITIS.

11 cases, all ages.

EPIDEMIC GASTRO-ENTERITIS in children in summer months, 33 cases with 13 deaths. Of the fatal cases 8 were in boys. Of the non-fatal 12 were in boys and 8 in girls. The age-incidence was from 10 weeks to 5 years, the majority in children under 1 year.

85. ABDOMINAL, VARIOUS.

(*a*) VISCEROPTOSIS.—34 cases, none fatal. 4 cases only in men ; 13 cases were operated on. Of these 9 had appendicectomy and colopexy, 2 had appendicectomy only, 1 had Rovsing's operation performed ; and nephropexy was done in the other case. Abdominal belts were provided for 14 patients. 1 patient refused treatment. In the other cases treatment consisted of tonics, aperients and massage.

(*b*) ABDOMINAL NEOPLASM.—10 cases, 1 fatal. No post-mortem was obtained. Exploratory laparotomy done in 7 cases; colostomy performed in 2 of these. In 4 cases there was wide-spread involvement of the peritoneum; in one the pelvis in a boy, æt. 7, was full of growth, which on section was reported as sarcoma. The ovary was thought to be the primary site in 2 cases, the breast in 1, and the colon in 2.

(*c*) Multiple Hydatid Cysts.—1 case in a woman, æt. 36, who had never been abroad. In 1911 a cystic tumour, found to be hydatid, removed from peritoneum in hospital. Further cyst removed in 1918. Abdominal swelling again marked in last 18 months. On examination there was a cystic swelling in the left abdomen. The eosinophil count was 7 per cent., total leucocytes 6000. At operation many cysts, some calcified, found in the abdomen and pelvis. 2 cysts removed, others punctured and drained. Discharged 6 weeks later, wound healed.

DISEASES OF DIGESTIVE GLANDS.

88. Cirrhosis of Liver.

8 cases, 3 fatal. 6 in alcoholic subjects, the other 2 probably alcoholic. Post-mortem examinations in 3 cases; death due to cardiac failure in 2 and pneumonia in 1. Paracentesis in 2 cases, laparotomy and evacuation of fluid in 2 others. 1 man had a Talma-Morison operation performed. The Wassermann reaction done in 3 cases, all negative.

Male, æt. 50. Admitted to be an excessive beer drinker. He gave a 5 weeks' history of swelling of the abdomen, with no marked anorexia, no vomiting, and very slight discomfort after meals. Paracentesis was performed soon after admission: the liver was not palpable. Readmitted within a month of discharge. A second tapping was done, and as the ascites quickly returned a Talma-Morison was performed. A month later a third paracentesis had to be done and the condition on discharge showed no improvement.

91. Jaundice.

(*a*) Catarrhal Jaundice.—16 cases, none fatal. 7 in children.

(*b*) Acholuric.—2 cases in females, æt. 13 and 20. No family history of jaundice obtained in either. Both cases showed enlargement of the spleen, slight jaundice with bile pigment identified in the blood-serum, but no bile found in the urine. There was marked fragility of red cells in 0·6 per cent. saline in both cases. Convalescence after splenectomy was normal; the younger child was readmitted 7 months later with acute nephritis.

(*c*) Jaundice.—2 cases followed intensive treatment for syphilis by salvarsan injections. Both discharged cured. 1 other case of jaundice occurred in a man with a strongly positive Wassermann reaction where no treatment had been given. A fourth case was diagnosed as recurrent jaundice of unknown causation.

Male, æt. 65. In 1920 patient was jaundiced and clay-coloured stools were noted for a week. Since then each 2 months patient has had recurrent attacks of jaundice unassociated with pain or loss of weight. During an attack the patient was drowsy and flatulent. On examination there was no fever, the general nutrition was good. Jaundice was moderate and cleared quickly. The liver was palpable 2 in. below the costal margin, and the urine contained bile. No other abnormalities were noted. On discharge 14 days later there were no signs or symptoms.

92. PANCREAS.

CARCINOMA.—8 cases, 3 fatal. 3 cases had medical treatment. 1 case had exploratory laparotomy, 3 cases had cholecyst-gastrostomy, and in 1 case gastrostomy was performed for the removal of Murphy's button used in a previous operation 6 months previously. In the fatal cases 2 died shortly after operation—cholecyst-gastrostomy and 1 from hæmatemesis from an associated gastric ulcer.

PANCREATITIS.—2 cases of acute pancreatitis, both fatal. 1 of chronic pancreatitis. In this case death was from general peritonitis following cholecystenterostomy.

93. DIGESTIVE, VARIOUS.

(*a*) CARCINOMA OF LIVER.—3 cases, none fatal. Treatment symptomatic in all. Cæcum suggested as site of primary growth in 1; in others not known.

(*b*) TROPICAL ABSCESS OF LIVER.—1 case in a soldier who had had amœbic dysentery in Egypt in 1918. Treatment by incision and drainage. The pus evacuated contained no amœbæ.

(*c*) ENLARGED LIVER.—3 cases. No cause given in 1 in a child. 1 case had laparotomy—a portion of liver tissue removed showed evidence of chronic inflammatory change. 1 case diagnosed as syphilitic hepatitis. Here the Wassermann was strongly positive and reduction in size of the liver was obtained after giving mercury and iodides.

(*d*) TAPE-WORM.—7 cases. All treated with *felix mas*. In 1 case only was the head identified in the portion of worm discharged. Probably all *T. saginata* infections.

DISEASES OF PERITONEUM.

95. TUBERCULOUS PERITONITIS.

18 cases, none fatal. Laparotomy was performed in 4 cases as an aid to diagnosis; at 1 miliary tubercles were found scattered over the peritoneum. 1 case had an excision of sinus following tuberculous peritonitis. Ascites was noted in 2 cases. 7 cases had abdominal masses suggesting enlarged glands, and in 6 cases the only local signs were distension of abdomen with "doughiness" on palpation.

In 5 cases evidence of lung involvement was present. 1 case had a pleural effusion, another showed pleural crepitus. Fibrosis of lung was diagnosed in 2 cases, and in 1 there was active tuberculosis of left apex.

Medical treatment consisted of balcony nursing, giving oil and malt, and in 4 cases exposure to ultra-violet rays. 1 child, with a large mass in the right iliac fossa, showed marked improvement with heliotherapy.

96. Various Diseases of Peritoneum.

(*a*) Peritonitis of unknown origin. 3 cases, 1 fatal. Post-mortem not obtained. 1 case had laparotomy—the pus then obtained was sterile on culture. At operation no source of infection was found.

(*b*) Retro-peritoneal Sarcoma.—3 cases, all fatal.

Male, æt. 29. History of 3 months' malaise with hæmoptysis. He was able to continue work till a few days before admission, when a severe hæmoptysis was followed by marked dyspnœa. No history of digestive symptoms obtained. He was admitted extremely collapsed, coughing up blood, and died a few hours later. A hard mass was palpable in the epigastrium ; both lungs were full of crepitations. At the post-mortem a large retro-peritoneal mass was found in the upper abdomen, the lungs, liver and kidneys showed extensive secondary deposits and on section the growth was diagnosed sarcoma.

In the other cases the length of history also given as 3 months. Laparotomy done in both and portion of growth removed. 1 was shown to be a fibro-sarcoma, the other a spindle-celled sarcoma. At the post-mortem no secondary growths were found in either.

(*c*) Peritoneal Adhesions.—13 cases, none fatal. In 12 cases previous operations had been performed ; in 9 cases appendicectomy, 1 ovariotomy, 1 laparotomy and 1 operation on gall-bladder. Treatment consisted of gastro-enterostomy in 2 cases for gastro-hepatic adhesions, division of adhesions in 6 cases and cæcopexy in 1. 1 case also had ovariotomy performed.

In 1 case, following inflation of the peritoneum with oxygen, a skiagram showed adhesions between the colon and anterior abdominal wall.

DISEASES OF THE DUCTLESS GLANDS.

101. Addison's Disease.

8 cases, 2 fatal.

Treatment by supra-renal extract, injections of pituitary, or thyroid. The 6 cases on discharge showed some improvement, especially decrease in vomiting. The average systolic blood-pressure was 105 mm. Hg., the highest being 115 mm. and the lowest 80 mm. No case gave evidence of tuberculosis elsewhere. Pigmentation, asthenia and pain related to food in all cases, vomiting in 4 cases.

Female, æt. 40. History of progressive anorexia, giving the impression of dysphagia for 1 year. Epigastric pain and nausea for 5 weeks with pigmentation and attacks of syncope for the same period. A previous œsophagoscopy had shown no obstruction. Pigmentation of face, hands, abdomen and axilla marked. The blood-pressure was 90 mm. Syncopal attacks and vomiting marked. Death within 2 weeks. Post-mortem 1 adrenal could not be identified, the other was small and fibrotic on section.

Male æt. 35. A case in a syphilitic subject. The length of history was indefinite. Bronzing and asthenia, with attacks of syncope, marked on admission. Epigastric pain and nausea were present, but no vomiting. The Wassermann was strongly positive. Treatment by injections of N.A.B. produced marked relief of symptoms, but the blood-pressure on discharge 2 months later was still *circa* 100 mg. A month later he was readmitted with return of symptoms and died within a week. Post-mortem : The adrenals were small and fibrotic.

102. EXOPHTHALMIC GOITRE.

52 cases with 2 deaths. 4 cases in males.

Both fatal cases had had hemithyroidectomy performed within 24 hours of death. In 1 no post-mortem was allowed. The other, a subject of very advanced mitral stenosis, died from cardiac failure.

Treatment.—Partial thyroidectomy was performed in 28 cases, and in 3 further cases of recurrent Graves's disease a second operation on the remaining lobe was done. 3 cases with auricular fibrillation were treated by rest and digitalis. 1 case with marked mental symptoms had treatment by radium, and X rays were used in the treatment of another case. The treatment of the others was by rest, bromides and tonics. 2 of the cases who afterwards had operation had been on a special fat-free diet with added cod-liver oil.

Complications.—Auricular fibrillation 3 cases, mitral stenosis in 2, tonsillitis 3 cases, cystitis in 1, erythema nodosum 1, and mental change 1.

Basal metabolism rate recorded in 15 cases, giving an average of +31 per cent. The highest is given as + 92 per cent. 3 cases diagnosed clinically as Graves's disease and confirmed microscopically in 1 gave normal readings (+ or − 10 per cent.).

Female, æt. 41. History of goitre for 8 years. Tachycardia, dyspnœa and nervousness with tremors noticed in the last 18 months. At first the case was regarded as one of Graves's disease. Goitre, tremor and tachycardia (P. 100) were present. Exophthalmos was slight. The basal metabolic rate was found to be − 1 per cent. Ext. thyroid was given. 3 weeks later the patient was feeling better and the rate was now found to be + 15 per cent.

Male, æt. 66. History of Graves's disease for 3 years. He was treated in hospital in 1919. Patient now complained of polyuria of 2 months' duration. The exophthalmos had been slowly progressive and on examination was extreme. There was no enlargement of the thyroid and no tachycardia. The patient was nervous and irritable, and a fine tremor was present. The optic discs and visual fields were normal. An X ray showed enlargement of the sella turcica with erosion of the posterior clinoid process. Injections of pituitary gave no benefit and patient was discharged unrelieved.

104. VARIOUS DUCTLESS GLANDS.

(*a*) SPLEEN.—5 cases of splenic enlargement of unknown origin. None fatal. Splenectomy done in 2 cases.

Female, æt. 56. History of 8 months' left-sided abdominal pain, with some flatulence but no vomiting. Examination revealed no abnormality except a spleen extending to the level of the umbilicus. The blood-count was normal. Bismuth meal normal. A laparotomy showed no abnormality except the enlarged spleen. This was removed. A report on the microscopical appearance showed chronic splenitis and perisplenitis, with marked thickening of the blood-vessels. Cultures from the spleen were negative.

Male, æt. 7. No previous illness. For several months there had been a progressive, painless abdominal swelling. Latterly attacks of dyspnœa and cyanosis were noted. On examination the liver was palpable to the level of the umbilicus, and the spleen was enlarged 3 in. below the costal margin. There was no ascites or jaundice, though a trace of bile-pigment was present in the urine. The Wassermann was negative. A blood-count showed 3,900,000 red cells and 2920 whites, with no change in the differential count. Following reduction of the splenic tumour by X-ray treatment, the spleen was excised. This on section showed hyperplasia and fibrosis, and a streptothrix was present. On discharge there was no decrease in the size of the liver. The blood-count a month after operation showed 5,660,000 red cells and 8000 white cells.

(*a*) BANTI'S DISEASE.—2 cases in females æt. 12 and 13. In 1 the spleen was removed.

(*b*) PITUITARY.—3 cases. 1 case of acromegaly in which X ray showed complete destruction of the pituitary fossa. 1 case of Frolich's disease in a girl, æt. 10, who also suffered from right-sided convulsive attacks. This case showed no improvement on treatment by pituitary gland. The third case also showed a tendency to obesity and was found to have optic atrophy. The basal metabolic rate was given as − 33 per cent.

(*c*) HYPOTHYROIDISM (*see also* 102).—1 case.

Male, æt. 21, with a history of 2 years' obstinate constipation unrelieved by long courses of aperients. The bowels were opened usually once weekly. The patient was dull, with a pallid, harsh skin. The temperature was subnormal and the pulse-rate *circa* 60. Constant dull headache was present. The metabolic rate was given as − 13 per cent. Treated by thyroid converted this to − 2 per cent., and on discharge there was a normal action of the bowels daily.

DISEASES OF THE GENITAL SYSTEM.

109. DISEASES OF THE OVARY.

(*a*) CYSTS, SIMPLE AND MULTIPLE.

Cystadenoma.—18 cases, 11 of which were unilateral and uncomplicated. 2 were associated with adhesions. In 1 of the latter a tear of 2 in. was inflicted in the rectum during removal but the patient made a very good normal recovery. 3 cases where the disease was bilateral. 1 case of torsion of the pedicle. 1 case where a large ovarian cyst was diagnosed in the Out-Patient Department, but ruptured there during examination; the same patient was subsequently admitted and operated on for this cyst, which had re-filled.

Embryoma.—1 case of considerable interest, as the patient was confined 18 months before, the child being stillborn and severe lacerations being inflicted, resulting in a chronic recto-vaginal fistula.

Blood-cysts.—2 cases, 1 associated with chronic inflammatory changes in the corresponding tube.

Lutein cyst.—1 case.

Suppurating cysts.—2 cases associated with inflammatory changes in the Fallopian tubes. Both very adherent. Tube drainage, good recovery.

(*b*) OTHER DISEASES, INCLUDING MALIGNANT DISEASE.

Carcinoma.—16 cases, 12 of which were inoperable, being complicated by numerous deposits in omentum, bowel, peritoneum and liver. In the other 4 cases both ovaries were removed, and there was no macroscopic evidence of secondary growths. 3 cases died, 1 from toxæmia and exhaustion, 1 from carcinomatosis, the third from exhaustion of fæcal fistulæ.

Fibroma.—2 cases, 1 a girl of 17, who had had several months of slight continuous uterine hæmorrhage ; the second a woman of 48 with no special symptoms.

(*d*) *Broad ligament cysts.*—3 cases ; 1 associated with tuberculous disease of the opposite Fallopian tube ; the second affecting both broad ligaments ; the third a large cyst of the right broad ligament.

110. DISEASES OF THE FALLOPIAN TUBES.

(*a*) SALPINGITIS.

9 cases, disease bilateral. 4 of these were treated by palliative measures ; 2 had both tubes and 1 ovary removed ; 1 had both tubes and the appendix removed ; in 1 case the uterus, both tubes and 1 ovary were removed ; in 1 case the density of the adhesions was such as to preclude identification on removal of any structures. 5 cases of tuberculous salpingitis ; in 3 cases the disease was limited to the uterine appendages, and both tubes and 1 ovary were removed ; in 1 of these 3 cases the omentum was adherent over the pelvic structures and a small quantity of pus found under it, both tubes and 1 ovary being removed. In all 3 cases the tissues removed were found microscopically to be affected by tuberculosis.

In 1 case there was generalised miliary abdominal and pelvic tuberculosis with much ascites, and laparotomy only was done. In 1 case the patient was suffering from phthisis, and an examination under anæsthetic showed a hard mass behind and to the left of the uterus which was thought to be tuberculous. 3 cases unilateral disease. In 2 cases the tube and ovary were removed, in 1 of these being attached to a rudimentary uterine horn, which was also removed. In 1 case the tube and also the appendix were removed.

(*b*) PYOSALPINX AND TUBO-OVARIAN ABSCESS.

3 cases of unilateral pyosalpinx with involvement of the corresponding ovary and with chronic inflammation of the opposite tube. In all 3 the tube and ovary of 1 side and the tube of the other side were removed. 3 cases of unilateral pyosalpinx ; in 1 case the patient had had a previous salpingectomy of the other side ; in the other 2 cases the tube and ovary were removed, the opposite tube being apparently normal. 1 case of tubo-ovarian abscess communicating with the rectum, where the tubo-ovarian mass was removed by laparotomy. 1 case of tubo-ovarian abscess associated with colon bacilluria, the tube and ovary being removed. 1 case of ruptured pyosalpinx admitted with severe spreading peritonitis, where the ruptured tube and ovary of the same side and the pyosalpinx of the opposite side were removed.

(*c*) PRIMARY CARCINOMA OF THE FALLOPIAN TUBE.

1 case. Laparotomy ; numerous metastatic growths of omentum and pelvic peritoneum. Preliminary curettage of uterus—normal.

111. ECTOPIC GESTATION.

6 cases of tubal rupture with diffuse intra-peritoneal hæmorrhage and no attempt at encystment. In all cases the ruptured tube was removed. In 2 cases the initial shock was so great that gum-saline infusion was given during the operation. 1 case developed paralytic ileus, for which ileostomy was done with success, but the patient died some days afterwards of pulmonary infarction.

4 cases of tubal mole: in 2 the tube only, in the other 2 the tube and ovary were removed. In 1 of the latter the patient developed acute appendicitis while still in hospital, for which appendicectomy was done.

4 cases of pelvic hæmatocele. In 1 the tube only was removed; in 3 the affected tube and ovary were removed.

In 1 case there was an attempt at tubal abortion with a peri-tubal hæmatocele; here a partial salpingotomy was done.

112. MENSTRUAL DISORDERS.

(*a*) MENORRHAGIA AND METRORRHAGIA.

24 cases of menorrhagia. 11 of these turned out to be apparently functional, not being associated with changes in the endometrium. They were all treated by dilatation and curettage. 4 apparently functional cases treated by palliative measures. 1, a girl of 15, of a possible hæmophylic tendency, treated by injections of horse-serum. 3 cases associated with retroversion all replaced, 1 also curetted. 1 case treated by curettage who also had prolapse of vaginal walls, for which colpo-perineorrhapy also was done. 4 cases, where changes in the endometrium were reported, all curetted.

32 cases of metrorrhagia. In 11 of these exploration and curettage was done, but no change could be demonstrated. The average age of these cases was 48, and the hæmorrhage was attributed to climacteric causes. In 3 cases of younger women the curettage was done for the third time with no demonstrable change. These were all multiparous women.

In 2 cases the hæmorrhage dated from abortion, but no pathological condition could be found on curettage.

In 5 cases it was thought that changes were present in the curetted endometrium; 1, for example, was returned as "hæmangiomatous."

In 5 cases the hæmorrhage was attributed to fibrotic uterus. In 3 of these 5 cases hysterectomy was done, 1 was curetted, 1 was admitted urgently for profuse hæmorrhage, which ceased soon after admission, but the patient died 12 hours after of heart failure from excessive anæmia. Here post-mortem examination showed the uterus to be fibrotic.

In 5 cases palliative measures were adopted with apparent success, as the patients did not return. In 1 case curettage was first performed; 3 months later radium (mg. 100) was introduced in the uterus for 24 hours. There was then improvement for 3 months, but this was followed by 3 months' continuous loss. Subtotal hysterectomy was then done. The patient was æt. 28 and there was no demonstrative change in the uterus.

(*b*) DYSMENORRHŒA.

23 of the virginal type without physical signs all dilated and curetted. 2

of these had had the operation before, 1 being relieved for 1 year, the other for several years.

6 cases associated with menorrhagia all curetted. 3 of these had marked retroversion.

2 cases treated by palliative measures.

5 cases associated with sterility in young women married for 3 to 7 years. All dilated and curetted. No physical signs in pelvis.

113. PREGNANCY AND ITS DISORDERS.

(*a*) ABORTION.

3 cases of threatened abortion ; 2 patients were discharged well, 1 had to be evacuated for excessive hæmorrhage.

3 cases of inevitable abortion, 2 of which were evacuated spontaneously, the other by operation.

13 cases of incomplete abortion, 12 of which were treated by evacuation; 1 was evacuated spontaneously.

14 cases of complete abortion, all of which were treated by rest, douching and ergot.

3 cases of hydatidiform mole, all of which were treated by evacuation and made good recoveries.

3 fatal cases, 2 of which died of septicæmia after evacuation. In 1 of these the causative organism was the *B. aërogenes capsulatus.* The third case died of uræmia, the abortion being a side issue.

114. DISEASES OF THE BODY OF THE UTERUS.

(*a*) ENDOMETRITIS.

4 cases of senile endometritis all associated with discharge of fœtid pus, all dilated and drained.

3 cases chronic simple endometritis. Dilated and curetted.

1 case tuberculous, treated by dilatation and curettage.

(*b*) FIBROMYOMATA.

22 cases of complete hysterectomy ; 27 cases of subtotal hysterectomy ; 14 cases of myomectomy ; 3 cases of enucleation by the vaginal route ; 2 cases where on account of absence of symptoms operation was considered unnecessary ; 1 case treated by X rays ; 1 case treated by radium ; 1 fatal case of subtotal hysterectomy, who died of broncho-pneumonia.

(*c*) POLYPI.

9 cases of fibroid polyp, 8 of which were treated by removal, dilatation and curetting,1 by removal, followed by radium application—100 mg. for 18 hours.

3 cases of adenomatous polyp of the body of the uterus, all removed, followed by dilatation and curettage.

4 cases of placental polyp all treated by removal with little or no curettage and disinfection with Churchill's iodine.

(*d*) MALIGNANT DISEASE.

6 cases, of which 4 were carcinoma, 1 sarcoma and 1 chorion-epithelioma; all treated by complete hysterectomy.

The case of sarcoma was probably a case of sarcomatous change in a fibroid. This case ended fatally, the whole abdomen being filled with secondary deposits.

The case of chorion-epithelioma was in a young woman, æt. 25, who had suffered from an early abortion followed by very severe floodings. Preliminary curettage revealed the presence of the growth.

(*e*) VARIOUS.

2 cases of cystic adenoma of the uterus. 1 of these showed a large cystic swelling containing 3 to 4 gallons of dark brown, muddy fluid, similar to retained menstrual blood. This case was the subject of a communication at the Obstetric Section of the Royal Society of Medicine.

115. DISEASES OF THE CERVIX.

(*a*) CARCINOMA.

24 cases were found to be inoperable. The growth was here curetted and radium application made. In 1 of these cases, after 2 applications of radium the growth seemed to disappear and a Wertheim's operation was done. In sections made of the cervix a very small focus of carcinoma was found, and that very atypical. In another case a resection of bowel had been done 1 year before, and the cervical growth was found to be colloid carcinoma, probably secondary to the intestinal gowth.

5 cases where complete hysterectomy was done and radium applied immediately to the vaginal vault.

5 cases where Wertheim's radical hysterectomy was performed. In 1 case this was followed immediately by incontinence of urine from a ureteral fistula. A nephrectomy of the affected side was done for this.

In 2 cases treatment was palliative only.

In 1 case a complete hysterectomy was done.

In 1 case laparotomy was performed 14 days after radium application, but the radical operation was abandoned.

(*b*) VARIOUS.

11 cases of mucous polyp of the cervix where the polyp was removed and the endometrium curetted.

6 cases of lacerated cervix. 2 of these where malignant disease was suspected, but excluded by excision of a portion. In all cases repair was done.

1 case of fibroid polyp of the cervix : excised.

1 case of small sessile fibroid of the cervix removed by amputation.

116. PELVIC INFLAMMATION.

(*a*) CELLULITIS.

4 cases, 3 treated by palliative methods, 1 by laparotomy. In the latter case the great part of the inflammatory trouble was in the cellular tissue, but the uterine appendages and appendix were secondarily involved. The left tube and appendix were removed.

(*b*) PERITONITIS.

5 cases. 2 were treated by palliative methods, 1 by removal of the left tube, which was acutely inflamed, being the primary focus of the disease.

1 case of pelvic abscess which burst spontaneously through the rectum.

1 fatal case of pelvic abscess treated by posterior colpotomy. This patient was much emaciated on admission and died later of general toxæmia.

117. VAGINA AND VULVA.

(*a*) URETHRAL CARUNCLE.

14 cases. 4 cases treated by excision, 6 by cautery only, 4 by excision and cautery combined.

(*b*) PRURITUS.

4 cases. 2 treated by radium, 2 by local application.

(*c*) NEOPLASM.

2 cases of epithelioma treated by excision. 1 carcinoma of Bartholin's gland treated first by incision (as an abscess), secondly by excision, thirdly by radium. 2 cases of cysts of the vagina, both excised.

1 large papilloma of vulva.

1 hæmangioma of urethral orifice.

(*d*) FISTULA.

2 cases, treated by excision.

(*e*) HÆMATOCOLPOS.

2 cases, treated by incision.

(*f*) VARIOUS.

Vaginitis, 2 cases.

2 cases of dysparcunia from tough resistant hymen—excised.

3 cases of urethritis, treated by suitable applications.

1 fatal case of abscess of vulva in a baby of 7 weeks—incised.

118. RUPTURED PERINEUM.

6 cases of complete rupture all repaired.

1 case of bad rupture not complete, where colpo-perineorrhaphy was performed.

119. PROLAPSE AND DISPLACEMENTS.

(*a*) PROLAPSE OF VAGINAL WALLS.

4 cases of rectocele and cystocele treated by anterior colporrhaphy and colpo-perineorrhaphy.

11 cases of rectocele only treated by colpo-perineorrhaphy.

1 case of cystocele only treated by anterior colporrhaphy.

4 cases of minor prolapse of vaginal walls discharged without operation and treated by palliative methods.

(*b*) PROLAPSE OF UTERUS.

17 cases, 16 of which were treated by operation. 3 of these were cases of complete procidentia.

Anterior colporrhaphy, colpo-perineorrhaphy, amputation of cervix, 6; anterior colporrhaphy and colpo-perineorrhaphy, 3; amputation of cervix and colpo-perineorrhaphy only, 2: colpo-perineorrhaphy only, 2; vaginal hysterectomy, anterior colporrhaphy, colpo-perineorrhaphy, 1 case; subtotal abdominal hysterectomy (where a fibroid also was present), ventral fixation of the stump, 1: Le Fort's operation, 1 (a case of complete prolapse); 1 case associated with cyesis treated by rest and pessary.

(*c*) RETROVERSION.

7 cases were treated by ventral suspension. 1 of these also had the

left ovary removed for cystic condition. 2 cases were treated by ventral fixation. 5 cases were treated by replacement under anæsthetic and pessary.

(*d*) CHRONIC INVERSION.

1 case. This patient was admitted almost moribund from P.P.H. within 12 hours of labour. Several attempts were made unsuccessfully 48 hours afterwards to reduce the inversion. 6 weeks later it was reduced with Aveling's repositor.

120. GENITAL, VARIOUS.

6 cases of sterility—3 dilated and 3 where no operation was advised. 4 cases of leucorrhœa. 2 treated by dilation and curettage, 2 by palliative methods.

DISEASES OF THE URINARY SYSTEM.

121. MOVEABLE KIDNEY.

7 cases, 6 in females. 5 treated by nephropexy, the others provided with belts. The right kidney involved in 6 cases, both in the other.

123. HYDRONEPHROSIS.

5 cases, 2 in men. 4 cases operated on. The right kidney affected in 3 cases. The cause in 1 case only could be given, *i. e.* an aberrant renal artery, which at operation was ligatured. Nephrectomy was performed once and pyeloplasty twice.

124. PYONEPHROSIS.

2 cases. In 1 case the kidney had been explored 2 years previously. Pyuria had persisted since. The kidney at operation was found very fibrotic and scarred, and was removed. The other case was fatal.

Female, æt. 26. Urinary symptoms had been present for 3 years and hæmaturia had been present for 3 months. The patient was pregnant 3 months. On admission there was extreme albuminuric retinitis; the urine contained blood, pus and many casts. The lumbar region was very tender, preventing palpation of the kidneys. The blood urea was 146 mg. 4 days later abortion took place. The condition became worse; blood urea was now given as 256 mg. Uræmic convulsions preceded death. Post-mortem the kidneys were deformed; a large bilateral pyonephrosis was present.

126. ACUTE NEPHRITIS.

21 cases, with 2 deaths. The age varied from 2 to 50 years. 2 of these cases were possibly glandular fever. Both showed a leucocytosis. 5 of the total appeared to have followed tonsillitis and 1 was probably a complication of scarlet fever. Another case was admitted with peritonsillar abscess. A history of recent septic skin trouble was obtained once and 3 other cases had recently had acute abscesses. 1 case followed an illness diagnosed as influenza. Under treatment 6 cases were discharged with no signs or symptoms. The others had persisting albuminuria, and in 6 cases hæmaturia. 1 case was readmitted 2 months after discharge with a progressive lesion. In hospital 1

child developed whooping-cough; another diphtheria. Both were sent to a fever hospital.

The blood-urea was estimated in 12 cases. The highest report showed 411 mg. of urea per 100 c.c. of blood in a case without uræmic manifestations. A month later, after treatment, a second examination showed the blood-urea to be 25 mg. The urea concentration test was done in 12 cases.

Both fatal cases died within 24 hours of admission.

Female, æt. 14. History of tonsillitis 1 month previously. Indefinite malaise followed this illness. On the day of admission there were 2 convulsive attacks. The temperature was normal; slight œdema of the face was present. The urine was solid with albumen. The blood urea was 40 mg. Uræmic convulsions were persistent till death in spite of venesection and morphia injections. Post-mortem.—Acute tubular nephritis was present.

Male, æt. 34. History of 8 days' dyspnœa with œdema of face and feet. The patient was admitted very dyspnœic and collapsed. There was œdema of legs and signs of effusion into both pleural cavities. The urine contained albumen, blood and epithelial casts. There were no uræmic manifestations. Post-mortem.—Acute nephritis with cardiac failure.

127. CHRONIC NEPHRITIS.

42 cases with 14 deaths. Of the fatal cases 12 were in males. Of the non-fatal, 17 were in men and 11 in women.

Of the non-fatal cases a history of acute nephritis was obtained in 5 cases; 2 cases had followed trench nephritis. 1 case occurred in a girl under observation for colon bacilluria during the last 14 years.

Female, æt. 18. Pyuria and colon bacilluria diagnosed in 1908. She had been in hospital on 2 occasions. No treatment had been effective. She was admitted with a few months' history of failing vision. The urine contained pus, blood, granular casts and *B. coli*. The heart was hypertrophied. The blood-pressure 220 mg. Albuminuric retinitis was marked. Urea concentration was poor and the blood-urea 102 mg. Convulsive attacks were noted from time to time. The condition was not improved on discharge, and death occurred soon afterwards.

Complications noted were: Asthma, 2 cases; broncho-pneumonia, 1; aortic disease, 1; mitral disease, 1; auricular fibrillation, 1; cerebral hæmorrhage, 1; purpura, 1; 1 case of infantilism also noted.

Decortication of kidneys was performed in 3 cases.

The urea concentration test was done in 16 cases; the blood-urea content in 22.

The urea in the cerebro-spinal fluid was estimated in the case described above and found to be 81 mg. The Wassermann reaction was done in 8 cases and found negative in all.

Of the fatal cases the cause of death was given as uræmia in 7 cases, cardiac failure in 5, broncho-pneumonia in 1 and pericarditis in 1. Post-mortem examinations were obtained in 8 cases.

The blood-urea was estimated in 8 cases, and in 1 fatal case of uræmia the urea content of the cerebro-spinal fluid was returned as + 250 mg.

Male, æt. 11. History of 14 days' abdominal pain, vomiting and blurring of vision, with hæmaturia and œdema of the face for 4 days. The past history was good. On examination the boy was normally developed both mentally and physically. There was no œdema. The heart was hypertrophied, the apex beat forcible in the 6th space outside the nipple line. The vessel walls were thickened, the blood-pressure was 190 mm. systolic and 150 diastolic. The urine contained a thick cloud of albumen and blood, but no casts. Albuminuric retinitis was marked. The blood-urea content = 106 mg. The boy became semicomatose; in the intervals he complained of abdominal pain. A fortnight later uræmic twitchings were present and the blood-urea was now shown as 241 mg. Death followed convulsions. At the post-mortem the kidneys were found tough, fibrous and contracted. There was extensive atheroma of the aorta and the smaller vessels showed marked thickening.

133. URINARY, VARIOUS.

(*a*) PYURIA AND BACILLURIA.—5 cases. Of these 4 were infections with the colon bacillus. In the other the *B. tubercle* was found in the urine from the left kidney after catheterisation of the ureter. No further surgical treatment was carried out.

(*b*) HÆMATURIA.—9 cases, 2 in females. Cystoscopy was performed in 5 cases, X ray in 5, renal efficiency tests in 2, and examination for *B. tubercle* in 2.

Male, æt. 37. Had been under treatment for 3 years for hæmaturia, which followed attacks of lumbar pain. These attacks lasted 3 weeks, and in the interval patient felt well. He noticed frequency, and at times a tendency to œdema of the hands and feet, with at times urticarial eruptions. There had never been severe colic and there was no pain on micturition. Apart from some slight thickening of the vessels no abnormality was found on examination. The urine contained blood, sugar and some acetone. X-ray examination was negative. The blood-urea was 28 mg. Urea concentration 2·2 per cent. Cystoscopy showed "apparently pure blood coming from both ureters." The sugar tolerance test was normal, as also the basal metabolic rate. 3 weeks later on discharge the urine contained no abnormal constituent.

(*c*) OXALURIA AND PHOSPHATURIA.—5 cases, all in males. 1 case had been previously admitted and diagnosed as abdominal pain. The attacks were found to coincide with the eating of certain foods and to be followed by hæmaturia and oxaluria. X-ray examination and cystoscopy were negative.

(*d*) VARIOUS.—2 cases of albuminuria, 2 cases of frequency of micturition, and 1 of dysuria.

DISEASES OF THE MUSCULAR SYSTEM.

134. (*a*) MYOPATHY.

4 cases. 2 cases were diagnosed as facio-scapulo-humeral dystrophy, the other 2 as myotonia atrophica.

Female, æt. 42. History of 2 years' stiffness, with weakness and wasting of legs. On examination there was marked wasting and loss of power in the arms and legs. The tendon reflexes were obtained in the upper but not in the lower limbs. The facial muscles were not affected. Sensation was normal and no fibrillation was noted. There was bilateral cataract of the eyes. The myotonic reaction was present.

Male, æt. 46. History of 4 months' weakness of arms and legs with wasting and no sensory symptoms. On examination the general musculature was poor and movements were weak. No alteration in the cranial nerves or sensory system was detected. The tendon reflexes were present. No fibrillation was noted. The Wassermann reaction was negative.

(*b*) Myasthenia Gravis.

2 cases. 1, a man of 55, has been under observation for 7 years and has been admitted to hospital on 7 occasions. He now shows almost complete ophthalmoplegia and general muscle power is weak, but with periods of rest he is able to do some work.

Female, æt. 29. History of ptosis, starting on the right side, for 3 years; the arms have been affected for 18 months and latterly the legs. For 3 months difficulty in reading, in walking and in holding the head erect has been noted, and recently there has been dysphagia with a tendency for food to regurgitate through the nose. On examination there was the characteristic fatigue and inability to sustain movements. The right ocular muscles were more affected than the left. Treatment by injections of pituitary were thought to make the condition worse and the patient was discharged unrelieved.

DISEASES OF THE NERVOUS SYSTEM.

166. Cerebral Hæmorrhage.

12 cases, 10 fatal. 2 cases in infants the result of birth injury, both fatal.

In the non-fatal cases, 1, a man, brought into hospital comatose. Later a left-sided paresis developed. The Wassermann was negative, the urine contained albumen and the blood-pressure was 160 mm.Hg. The other, a woman, was discharged with a right-sided hemiplegia and hemisensory changes, but no aphasia.

Of the fatal cases 3 were pontine hæmorrhages, and 1 into the cerebellum. Of the hæmorrhages into the right cerebrum. 2 in number, blood was noted in the lateral ventricles. 1 case showed hæmorrhage into the left capsular region and into the left ventricle, and in the other death resulted from rupture of a small aneurysm.

Female, æt. 30. Admitted with a 5 days' history of intense headache accompanied by vomiting and followed by marked weakness. The mental state was dull; the abdominal reflexes were absent and a left extensor response was present. The urine contained no abnormality and the blood-pressure was not above 110 mg. The Wassermann of blood and cerebro-spinal fluid was negative. The cerebro-spinal fluid contained blood and slight excess of small lymphocytes. There was definite improvement in the next month, and the cerebro-spinal fluid now contained no abnormal constituent. At the end of this time death occurred after a right-sided convulsive attack. Post-mortem.—A ruptured nodular aneurysm on right middle cerebral. Elsewhere there was no evidence of arterial degeneration.

167. CEREBRAL THROMBOSIS.

3 cases, none fatal. All had anti-syphilitic treatment.

Male, æt. 36. Coma for 24 hours. Complete right hemiplegia. Cerebro-spinal fluid was under pressure and showed some degenerate polymorphs. Wassermann, doubtful positive. Discharged with residual hemiplegia.

Male, æt. 59. History progressive for 14 months. Spastic weak limbs and some bulbar signs—difficulty in talking and swallowing. Blood-pressure 190 mm. Hg. Wassermann negative. No improvement on discharge.

Male, æt. 65. History progressive right hemiplegia 3 months. Wassermann negative. Marked arterio-sclerosis. No improvement.

168. CEREBRO-SPINAL SYPHILIS.

9 cases, none fatal. 2 were admitted for lumbar puncture only. The others had anti-syphilitic treatment.

The Wassermann of blood positive out of 6 tested in 2 cases, and of 6 cerebro-spinal fluid no positive was obtained. Small lymphocytes were present in 3 of the cerebro-spinal fluid out of the 7 tested. Fits were noted in 4 cases.

Male, æt. 48. Brown-Séquard lesion. History of 1 month's loss of sensation in left leg, with loss of power in the right lower limb. The sensory loss was sudden; the paresis occurred gradually 3 days later. At the onset there was slight loss of sphincter control. On examination the pupils were irregular and reacted poorly to light. There was slight weakness of the right leg with an extensor plantar response. From the left foot to the level of the navel on the left side there was blunting of tactile and temperature sense; pain sense was lost completely. The Wassermann of blood and cerebro-spinal fluid was negative but an excess of small lymphocytes was present.

Under treatment power and sensation were regained almost completely.

169. CEREBRAL, VARIOUS.

(*a*) HYDROCEPHALUS.—5 cases. 3 fatal following decompression operations. 3 cases in children, 2 in adults.

Male, æt. 22. A student with signs of intracranial pressure. At operation moderately old hæmorrhage was seen round medulla, pons and mid-brain. Death occurred 1 month after subtentorial decompression.

Male, æt. 15. In last 5 years a history of paroxysmal headaches accompanied by vomiting. The development was abnormal. The genitalia were not developed and there was some obesity. The optic discs were normal. The eyes showed some lack of convergence, and there was spasticity of the legs, with contracture of the calf muscles. The cerebro-spinal fluid was normal. Decompression was performed without improvement in condition.

(*b*) HEADACHE.—8 cases. 2 of these diagnosed as migraine. 1 case was admitted for lumbar puncture only; this was found normal.

VERTIGO.—1 case of aural vertigo. There was a 6 years' history of deafness on right side, which, on examination, was found to be nerve-deafness. In the last month there had been attacks of vertigo and vomiting, which improved with treatment by arsenic and bromides.

(*c*) CEREBRAL ABSCESS.—1 case (excluding those secondary to aural disease).

Male, æt. 27, who complained of headaches following a wound of the occipital region in 1917. The pain was always localised to the left side of the head and accompanied by indistinct vision. In the last 24 hours fits had been noted. On examination there was no alteration in reflexes, and no change in the cranial nerves. The Wassermann was negative. Following an attack of intense headache patient suddenly died. Post-mortem.—An abscess in the frontal lobe of the left cerebrum was found. This had ruptured into the subdural space.

(*d*) MENTAL DEFICIENCY.—3 cases in children. 1 fatal. At post-mortem no changes save hyperæmia of brain noted.

170. CHOREA.

27 cases, none fatal. 1 noted as hemichorea. The youngest case was æt. 6½, the oldest was in a woman æt. 27.

Of these a history of rheumatic fever was obtained in 4 cases; rheumatic manifestations of growing pains and recurring sore throats were noted in the histories of 12 others, whilst the history was negative for rheumatism in 11 cases.

7 of the cases were noted as having cardiac disease; 1 case had pericarditis, 4 cases had double mitral disease and 2 others had mitral regurgitation.

The present illness was the first attack in 18 cases, the second in 4, and 5 cases had had more than 2 previous attacks of chorea.

Treatment consisted of isolation by screens and the administration of aspirin and arsenic. All benefited by treatment.

171. DISSEMINATED SCLEROSIS.

8 cases, none fatal. All in women. Treatment consisted of massage and electrical treatment. 1 case admitted to Surgical Side for relief of leg contractures, and 1 case explored for renal tumour. This at operation was found to be an abnormal lobe of liver.

Of the remaining 6 some loss of vesical control was noted in 4 cases; 1 of these had a heavy urinary infection. Bilateral weakness was present in 4 cases and the paresis was confined to the right side in 2. Intention tremor was noted twice. 1 lumbar puncture was performed; the fluid was not abnormal.

172. EPILEPSY.

(*a*) JACKSONIAN EPILEPSY.—3 cases, none fatal.

1 case followed gunshot wound of head for which several decompressions had been performed. The second case, a man æt. 24, gave a 4 years' history of fits occurring every second month. A fit consisted of spasm of the right hand followed by flexion of the right arm, and consciousness was not lost, nor did the convulsion become generalised. In hospital no fit occurred and no abnormality of nervous system was detected.

The third, a *female, æt.* 27, gave a history of attacks starting in the first pregnancy 7 years previously, and becoming worse in the second pregnancy 4 years later. An attack consisted of painful spasm of the right arm and leg. The Wassermann was negative and the cerebro-spinal fluid normal. The condition was controlled by bromides.

(*b*) EPILEPSY.—*Grand mal* 14 cases and *petit mal* 1 case. None fatal.

All save 1 case had had previous epileptic fits. 2 cases were said to follow injury to head. A history of family epilepsy was obtained in 4 cases, and in 1 other several members of the family were insane. 2 cases showed marked mental defect. Lumbar puncture was performed in 3 cases: 2 of these gave a positive Noguchi reaction; no excess of cells was noted.

(*c*) INFANTILE CONVULSIONS.—9 cases, all in children under 2 years. None fatal.

173. FUNCTIONAL DISEASE.

18 cases diagnosed as neurasthenia and 1 case as traumatic neurasthenia following a blow on the head. On admission this patient complained of intense headache of 1 year's duration. The reflexes were not altered; the examination of the cerebro-spinal fluid was negative; the cranial nerves were normal.

9 cases were diagnosed as hysteria. 1 of these on the Surgical Side was a case of hysterical joint disease, the left hip being involved. 2 cases had hysterical convulsive attacks. 1 case of facial tic was cured by injection of alcohol into the 7th nerve in the stylo-mastoid foramen.

Female, æt. 19. A case of pseudo-tetany. In 1918 a goitre was diagnosed; 2 years later spasm of the hands was noted, and in 1920 a partial thyroidectomy was performed. The patient had no symptoms till the previous week, when she complained of dysphagia, dyspnœa and palpitations followed by spasm of the hands and feet. On examination some enlargement of the thyroid was found to persist. The hands and feet were held in the tetany position and the patient was very emotional. Under treatment by valerian and bromides the condition rapidly improved.

174. ENCEPHALITIS LETHARGICA.

21 cases of encephalitis lethargica with 5 deaths. Also 3 non-fatal cases of sequelæ of encephalitis. Of the latter 1 showed inco-ordination and weakness of the right arm and leg, with a weakness of the left external rectus and active delusions 8 months after the original illness. Another, 4 years after the onset, complained of constant jerky movements and coarse tremors. There was marked hypotonus of muscles. Some improvement was obtained by electrical treatment. The third case, 2 years after infection, showed gross inco-ordination of movement. He was unable to stand without support, there was marked dysarthria and the mental condition was unstable. No improvement was obtained in hospital.

Of the 5 fatal cases post-mortem examinations were held in each. 2 fatal cases in children showed lymphocytes in the cerebro-spinal fluid during life. Post-mortem.—Microscopical sections showed typical changes with hæmorrhages and perivascular infiltration.

Female, æt. 25. Sudden onset, 2 hours previously, of vomiting and headache followed by coma. Admitted with left-sided paresis, semi-comatose and showing marked irritability. The cerebro-spinal fluid under pressure contained red cells and a few degenerate polymorphs. Death occurred a month later, when, apart from general congestion, a hæmorrhage into the right capsular region was found.

Female, æt. 47. History of 3 weeks' headache with intermittent delirium. On admission cerebral irritability was marked and there was head retraction. Double neuro-retinitis was present. Death occurred at the end of 4 weeks from onset. Post-mortem.—Typical microscopical appearances of *E. lethargica.* The cerebro-spinal fluid in this case showed blood and small lymphocytes.

Female, æt. 29. Cyesis 7 months. History: 14 days diplopia, 10 days twitchings of right side of trunk, and lethargy for 1 week. Admitted with slight fever, myoclonus of right pectorals and latissimus dorsi, lethargy, large inactive pupils, with weakness of both facial nerves and a divergent strabismus. The fœtal heart was heard on admission. There was no improvement in the condition and death occurred 8 days later. Abortion—a still-birth—of 7 months took place just before death. Post-mortem.—The main congestion appeared to be in the region of the crura, the pons and the spinal cord.

In the non-fatal cases lumbar puncture was performed in 7; of these no abnormality was noted in 4. 3 showed excess of small lymphocytes and 3 fluids were under increased pressure. On discharge 3 patients showed no signs; eye signs, unequal pupils, strabismus, etc., were seen in 5 cases, whilst 3 cases had definite mental impairment. 1 case each suffered from facial weakness, ataxia, hemiplegia, monoplegia, and 1 man complained of persisting headache.

1 case occurred in a pregnant woman—a healthy full-term child was born in hospital. Myoclonus was seen in 2 cases.

175. HEMIPLEGIA.

14 cases, none fatal. MONOPLEGIA. 2 cases, none fatal.

In the hemiplegic cases the paresis was on the right side in 7 cases, on the left in 5, and was double in the other 2. In children 4 cases were noted as following birth injury, and 1 followed an infective illness of unknown nature. In the adults 1 case followed trauma to head—there was a history of Jacksonian attacks in this case—2 followed encephalitis, and 1 was probably an embolic lesion in a subject with double mitral disease. Diabetes with atheroma was present in 1 case, syphilis in another, and the cause of 1 was not known.

The double hemiplegias occurred in *males, æt.* 58 and 64. 1 suffered from chronic nephritis and the other had had syphilis.

176. ACUTE ANTERIOR POLIOMYELITIS.

9 cases, none fatal.

1 readmission to Surgical Side. 1 case of polio-encephalitis and myelitis.

Lumbar puncture done in 1 case. Fluid showed excess of small lymphocytes and a few polymorphonuclears. A preceding history of febrile attack obtained in all save 1 case. Muscle groups in right leg were involved in 3 cases, and both legs were affected in 1 case. The left leg, left arm and right arm groups in 1 each case.

177. INTRA-CRANIAL TUMOUR.

14 cases, with 5 deaths.

Decompression with or without removal of the tumour was performed in 8 of the non-fatal cases and in 3 of the fatal. Both other fatal cases died suddenly before operation performed.

Portions of tumour for section were obtained in 8 cases and were returned as—

glioma, 3; neuro-fibroma, 2; tuberculoma, 1; fibrosarcoma, 1; and endothelioma, 1.

The location of the tumour is given as cerebellum 3 cases, pituitary 2 cases, auditory nerve 2 cases, and left motor area 2 cases. The tumour was present in the frontal lobe once and in the occipital lobe once.

The fibro-sarcoma occurred as a cerebellar tumour in a patient who had neuro-fibromatosis.

178. TUBERCULOUS MENINGITIS.

8 cases, all fatal. 1 fatal case entered under Section 25.

Lumbar puncture was performed in every case. Excess of small lymphocytes noted in 7 cases; the tubercle bacillus was not found in any. In the other case no excess of cells was found in two examinations, but diagnosis was confirmed at the post-mortem.

179. MENINGITIS.

11 cases. 1 case diagnosed as serous meningitis with optic neuritis.

Of the 10 cases 8 were fatal, 2 recovered. 1 of these was a cerebro-spinal meningitis with Type IV meningococcus; the other showed excess of lymphocytes in the cerebro-spinal fluid, but no organism.

Of the fatal cases polymorphonuclears were present in all the cerebro-spinal fluids.

A streptococcus was noted once, influenza bacillus in pure culture once, meningococci twice, a Gram-negative bacillus once, and 2 fluids were sterile on culture.

180. PARAPLEGIA.

10 cases, 1 fatal.

DIPLEGIA.—2 cases, both fatal.

4 paraplegics were diagnosed as syphilitic myelitis and all showed marked improvement on treatment: the cause of 1 was not given, and there appeared to be no improvement on anti-syphilitic treatment, whilst 1 other was diagnosed as meningitis circumscripta serosa, and in this case there was definite improvement following laminectomy for the relief of pressure. 3 cases were admitted to the Surgical Side for contractures resulting from spastic paraplegia.

The fatal case was in a *male, æt.* 16, admitted with a 3 months' history of pains radiating across shoulders, with 1 week's peræsthesia and paresis of legs. On examination there was a flaccid paralysis of the legs and abdominal muscles, with complete anæsthesia below 9 D. and a band of paræsthesia from D. 6 to D 9. X ray showed a tumour in connection with the head of the 4th rib on the right side. At operation a portion was removed and found to be a small, round-celled sarcoma. The patient's condition did not allow laminectomy. Death occurred 5 weeks later from respiratory failure.

DIPLEGIAS.—1 cerebral. There was no history of birth injury or infection of nervous system. 1 cerebellar—family history poor, 2 other children in family affected. On examination this case showed poor mentation, generalised hypotonia and marked ataxia. The speech was lalling, and continuous involuntary movements of hands and feet were present. The Wassermann was negative.

181. SCIATICA.

8 cases. The right leg involved in 3 cases, the left in 5. None fatal. All were improved by treatment consisting of radiant heat, electricity and massage, and drugs.

TRIGEMINAL NEURALGIA.—8 cases. 5 treated by inj. alcohol, 2 of whom had had previous injections. 2 cases treated by division of sensory root of 5th nerve and 1 case by extraction of carious teeth. All improved on discharge.

1 case of intra-orbital neuralgia in a student was improved by aspirin.

182. NERVES, VARIOUS.

2 cases of ERB'S PALSY treated by open division of subscapularis tendon and coraco-humeral ligaments.

1 case of brachial neuritis improved by electrical treatment.

1 case of facial paralysis, right side, of gradual onset, which probably followed an attack of encephalitis lethargica ; 1 case of facial paralysis said to have followed a chill. Marked improvement was obtained by electrical treatment.

183. PERIPHERAL NEURITIS.

11 cases, none fatal. The cause could not be given in 6 cases. 3 cases followed diphtheria and 1 occurred in a diabetic.

1 case, a *male, æt.* 39, was associated with double optic neuritis, œdema of shins and ankles, and a certain degree of myocarditis. The Wassermann was negative. The blood-count and cerebro-spinal fluid showed no abnormality and the renal function was not impaired. Progressive weakness and increase of œdema were noted in hospital and the case was sent to the infirmary.

184. TABES.

20 cases. 1 fatal from cerebral thrombosis.

These include 1 case of juvenile tabes and 2 of optic atrophy. The symptoms complained of on admission were abdominal pain in 7 cases ; lightning pains in 4 cases ; paræsthesia in 3 ; dimness of vision in 2 ; incontinence 1 ; perforating ulcer 1 ; and 2 were admitted for one night for lumbar puncture.

The Wassermann of blood performed in 15 cases, giving 8 positive reactions.

Lumbar puncture done in 10 cases with negative findings in 4, a positive reaction in 4 cases and small lymphocytes were noted twice.

Female, æt. 16. A case of juvenile tabes. A brother is a known congenital syphilitic ; a sister has a Charcot's joint. The patient gave a history of intermittent painless joint swellings as a child and "numbness of the body." In the last year there have been painful joint swellings and the patient was admitted with acute rheumatism and a double mitral lesion. The pupils were found unequal and inactive to light. There was ulnar anæsthesia, analgesia over C_8 and D_1 segments, hypotonia of limbs and absent tendon reflexes. The teeth were of the Hutchinson type; hearing was impaired, but the facies was not typical.

DEMENTIA PARALYTICA.—2 cases. Both showed mental changes, tremors, slurring speech and inactive pupils. Wassermann of blood positive in both. Cerebro-spinal fluid in 1 case gave a positive Wassermann reaction, in the other negative. Neither showed an excess of cells in the fluid.

185. VARIOUS DISEASES OF SPINAL CORD.

(*a*) ATAXY.—2 cases. 1 diagnosed as Freidreich's ataxy. The other followed diphtheria. This case, a *boy*, *æt.* 15, had had a sore throat 6 weeks previously during a camp epidemic. Ataxy had been noticed 1 week. No sensory changes were demonstrated; there was weakness of the legs and some diminution of tendon reflexes. The patient could not stand without support. The pupils reacted to accommodation, but he could not read without fatigue. On discharge 17 days later there were no signs or symptoms.

(*b*) SYRINGOMYELIA.—3 cases. HÆMATOMYELIA.—1 case in a *woman*, *æt.*41. She gave a history of 8 weeks' burning pains in the legs followed by difficulty in micturition and numbness and loss of power in the right side. On examination there was spastic weakness of legs and arms, more marked on right side, with a double extensor response and tactile sensory diminution on right side corresponding to the level of the 7th cranial segment. On discharge there was marked improvement.

(*c*) SUBACUTE COMBINED DEGENERATION OF CORD.—1 case, non-fatal. The blood-count showed no changes.

(*d*) TUMOUR OF SPINAL CORD.—3 cases, 1 fatal. Laminectomy performed in all. A post-mortem was not allowed in the fatal case. In 1 case there was rapid recovery after removal of an extra-dural tumour at the level of 9 D. This, on section, was a myxo-endothelioma. The fatal case showed multiple cysts in the region of the cauda, thought to have followed meningitis.

(*e*) PROGRESSIVE MUSCULAR ATROPHY.—4 cases, none fatal. 3 in men, 1 in a woman.

LATERAL SCLEROSIS.—4 cases, none fatal. 2 of these also showed changes in the hands of progressive muscular atrophy.

BULBAR PALSY.—2 cases, none fatal. A *woman*, *æt.* 55, who gave a 4 months' history of difficulty in speaking, followed by dysphagia and attacks of dyspnœa. There was weakness of muscles of mastication and of the orbicularis oris. The palate moved weakly, the tongue was wasted and tremulous and there was wasting of the neck muscles. The plantar response was flexor.

(*f*) VARIOUS.—1 case of paralysis agitans. 1 case of infective myelitis.

---

199. POISONS.

18 cases, 1 fatal. The poison stated to be food, 8; carbolic acid, 2; oxalic acid, 3; lead, veronal, acetanilide and paraffin oil 1 case each.

The fatal case—a suicide—used nitric acid; a tracheotomy was performed soon after admission and death occurred from broncho-pneumonia 14 days later.

---

200. UNCLASSIFIED.

(*a*) COCCYDINIA, 5 cases. (*b*) LUMBAR AND SACRAL PAIN, 5 cases. (*c*) METATARSALGIA, 1 case. (*e*) VARIOUS, 4 cases. 1 of insomnia, 1 of hiccough, and in 2 no diagnosis was made.

COMBINED OPERATION TABLE, 1921.

BY

P. H. MITCHINER, M.D., M.S.Lond., F.R.C.S.Eng.,

AND

A. H. RICHARDSON, M.A., M.B., B.Ch.Cantab., F.R.C.S.Eng.

Table II.—*Combined Operation Table.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
1. Diphtheria—			
Intubation	1	..	
Tracheotomy	1	..	Subsequent to intubation.
12. Lymphadenoma—			
Local excision . . .	4	..	
16. Pyæmia—			
Incision	4	2	
Aspiration	2	..	
Amputation	1	..	Of thigh for multiple abscesses and sinuses.
26. Abscess, acute—			
Incision	145	1	Fatal case of cervical abscess—death from pyæmia.
27. Abscess, chronic—			
Incision and curetting .	29	..	
Aspiration	6	..	
Excision	2	..	
28. Cellulitis—			
Incision	78	2	
Amputation	3	..	
Sequestrotomy . . .	1	..	
29. Sinus—			
Curettage	21	..	
Excision	5	..	
Estlander's operation .	1	..	
30. Carbuncle and furuncle—			
Excision	21	..	Camphenol plugging in 7 cases.
Incision	2	..	,, ,, 2 ,,
32. Nasal diseases—			
(*a*) Deflected septum—			
Submucous resection .	144	..	
Turbinectomy . .	16	..	
Enucleation of tonsils .	2	..	
Curetting adenoids .	3	..	
(*b*) Hypertrophic rhinitis—			
Turbinectomy . .	6	..	
(*c*) Various—			
Curetting ethmoidal cells	10	..	
Removal of foreign body	1	..	
,, of polypi .	14	..	Tracheotomy performed during operation in one case.
Diathermy for lupus .	3	..	
Drainage of septal abscess	1	..	
Cauterisation . .	1	..	
33. Antrum and sinus—			
(*a*) Antrum—			
Intra-nasal drainage .	11	..	Associated caries of palate in one case.
Carcinoma . . .	4	1	Radium inserted in all cases.

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
33. Antrum and sinus—*continued.*			
(*b*) Frontal sinus—			
Internal drainage	2	..	
External drainage	4	1	
(*c*) Chronic ethmoiditis—			
Curettage	44	1	No operation in one case owing to co-existing hæmophilia.
Turbinectomy	4	..	Fatal case; developed pyæmia and double lung abscess and empyema.
Excenteration	3	..	
Gasserian ganglionectomy	1	..	For persistent neuralgia following chronic ethmoiditis.
(*d*) Intra-nasal dacryocystostomy (West)	4	..	
34. Larynx—			
Excision of papilloma	1	..	
,, of fibroma	3	..	
Laryngo-fissure and excision	1	..	For endothelioma.
Diathermy	1	..	For carcinoma.
39. Pulmonary tubercle—			
Extra-pleural collapse	2	..	
Orchidectomy	1	..	
41. Empyema—			
Resection and drainage	19	..	
Thoracoplasty	4	1	
44. Lung abscess—			
Drainage	..	1	
45. Aneurysm—			
Excision of sac	2	..	
Exploratory laparotomy	1	1	One for aortic aneurysm and fatal case of superior mesenteric aneurysm.
49. Gangrene—			
Amputation of thigh	3	..	Circular.
Ligature of femoral vein	1	..	Much benefit and threatened gangrene averted.
54. Varicocele—			
Ligature and excision	10	..	
With eversion of tunica	4	..	
55. Varicose veins—			
Trendelenburg and local excision	33	1	Death due to pulmonary thrombosis.
Trendelenburg	8	..	
Local excision	21	..	
59. Cysts (skin and subcutaneous)—			
Excision of dermoid cyst	9	..	
,, of sebaceous cyst	3.	..	
,, of orbital cyst	2	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
59. Cysts (skin and subcutaneous) —*continued.*			
Excision of mucous cyst	1	..	
,, of cystic hygroma	4	..	
60. Tumours (skin and subcutaneous)—			
Excision of papilloma	5	..	
,, of nævo-lipoma	2	..	
,, of lipoma	33	..	
,, of fibroma	2	..	
,, of myxoma	1	..	Third recurrence, *c.f.* 1916–1920.
,, of neuro-fibroma	2	..	
,, of hæmangioma	14	..	Radium also used in one case.
,, of tuberculoma	2	..	
Diathermy of lupus	4	..	
Carcinoma, amputation	3	..	
Excision	10	2	Subsequent skin-graft in two cases.
Melanotic carcinoma, amputation	1	..	No changes in glands.
Rodent ulcer, excision	11	..	One case occurred in scar of operation to excise endothelioma, 1920.
Radium	2	..	
Diathermy	4	..	
Endothelioma, excision	5	..	
Sarcoma, local excision	4	..	
Radium implanted	2	..	
61. Ulcers—			
Excision	4	..	
Skin-grafting	2	..	
Amputation of leg	2	..	
63. Mouth and pharynx—			
Excision of epulis	3	..	
,, of ranula	2	..	
Curetting dental cyst	1	..	
Curetting dentigerous cyst	1	..	
Extractions for dental caries	12	..	
Papilloma excision	2	..	By diathermy knife.
Carcinoma—			
Superior maxilla—excision	3	..	
Tonsil and fauces excision	3	..	By diathermy knife in all cases.
Floor of mouth, excision	7	1	By diathermy knife in three cases.
Division of lingual nerve	1	..	
Pharyngoscopy and radium	1	2	
64. Tonsils and adenoids—			
Enucleation and curettage	730	..	
65. Lips and tongue—			
Excision, nævus of lip	1	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
65. Lips and tongue—*continued.*			
Excision, mucous hypertrophy	1	..	
,, carcinoma of lip .	4	..	Recurrence, one case—superior maxilla excised.
,, papilloma of lip .	1	..	
,, papilloma of tongue	4	..	
Carcinoma of tongue, excision	11	..	With diathermy knife in 4 cases.
Excision with glands . .	17	2	With diathermy knife in 3 cases.
Radium	3	..	
66. Œsophagus—			
Carcinoma, œsophagoscopy	14	..	Radium inserted in nearly all cases.
,, gastrostomy .	7	5	Kader-Senn operation, 11; Witzel's operation, 1.
Diverticulum œsophagoscopy	1	..	
67. Gastric—			
(*a*) Ulcer—			
Partial gastrectomy . .	9	1	Sleeve operation, 2, Mayo-Polya, 3, Bilroth II, 5.
Posterior gastro-enterostomy	12	1	No loop operation in all cases. Roux 1 case.
Anterior gastro-enterostomy	3	..	
Excision of ulcer . .	6	..	With gastro-enterostomy in 2 cases.
Balfour cauterisation of ulcer	1	..	With gastro-enterostomy.
Gastro-gastrostomy . .	1	..	For hour-glass stomach.
(*b*) Carcinoma—			
Gastrectomy	4	2	Bilroth II, 5; Mayo-Polya, 1.
Posterior gastro-enterostomy	11	1	No loop in all cases. Roux 4 cases.
Anterior gastro-enterostomy	5	2	
Local excision	1	..	
Gastrostomy	2	..	
Jejunostomy	..	2	
Laparotomy (explanatory)	6	1	
(*c*) Dilatation—			
Duodeno-jejunostomy .	1	..	For duodenal ileus.
(*d*) Various—			
Congenital stenosis . .	1	1	Ramstedt operation.
Posterior gastro-enterostomy for stenosis	7	..	From ulcer 6 and HCl poisoning 1 case.
Jejunal ulcer	2	..	Closure of gastro-enterostomy, 1; excision both cases.
68. (*a*) Duodenal ulcer—			
Gastro-enterostomy .	18	2	Also appendicectomy, 8 cases.
Pyloric occlusion with gastro-enterostomy	4	1	
68. (*b*) Perforated ulcers—			
Suture of gastric ulcer .	7	..	Also gastro-enterostomy in 1 case.
Suture of duodenal ulcer .	7	1	No peritoneal drainage employed, except in fatal case.

Table II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
70. Intestinal, various—			
(*a*) Simple—			
Excision of Meckel's diverticulum	2	..	
Resection and anastomosis for hyperplastic tubercle of cæcum	1	..	
Closure of fæcal fistula .	1	1	
Closure of colostomy .	1	..	
Trimming of prolapsed colostomy	1	..	
(*b*) Malignant carcinoma of colon—			
Excision and anastomosis .	5	1	
Colostomy . . .	7	2	
Sigmoidoscopy . . .	1	..	
Ileo-sigmoid anastomosis .	2	..	
71. Appendix, quiescent—			
Appendicectomy (rectus) .	128	..	Also herniotomy, 2 ; oöphorectomy, 5.
,, (McBurney)	9	..	Colopexy, 2.
72. Appendix abscess—			
Drainage	22	2	In no case across peritoneum.
Drainage *per rectum* .	2	..	
Cœliostomy . . .	1	..	Subsequently returned for appendicectomy in quiescent period (not included above), 17.
Pyelolithotomy . .	1	..	
Appendicectomy . .	1	..	
73. Appendix, acute—			
Appendicectomy . .	171	9	Drainage of residual abscess, 3.
With peritoneal drainage .	17	17	Drainage of residual abscess, 2. Laparotomy for subsequent obstruction, 2. Subsequent appendicectomy in quiescent period, 2.
74. Colitis—			
Appendicectomy and cæcostomy	1	..	
Sigmoidoscopy . . .	3	..	
75. Intestinal obstruction—			
(*a*) Simple, from bands and adhesions—			
Laparotomy and division .	6	3	Resection of gangrenous gut in 1 fatal case.
Volvulus resection and anastomosis	3	2	Also resection of mesenteric cyst, 1.
Laparotomy and excision of gallstone	1	..	
(*b*) Malignant—			
Anastomosis . . .	1	1	
Colostomy . . .	7	1	
Laparotomy . . .	1	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
75. Intestinal obstruction—*continued.*			
(*c*) Intussusception—			
Laparotomy and reduction	28	..	Also excision of adenoma of ileum, 1 case.
Resection and anastomosis	3	..	Ages 3, 6½, and 15 years.
76. Rectum and anus—			
Excision of prolapse	2	..	
Avulsion of polypi	3	..	
Sigmoidoscopy	7	..	
Division of anal stricture	2	..	
Carcinoma of rectum—			
Colostomy only	18	4	
Perineal excision with colostomy	6	..	
Trans-sacral excision with colostomy	2	1	Subsequent recurrence with obstruction 1 case.
Abdomino-perineal excision with colostomy	1	1	
77. Hæmorrhoids—			
Ligature	62	..	
Ligature and excision	16	..	
Whitehead's operation	2	..	
Injection of carbolic	10	..	Subsequent ligature, 2 cases.
78. Fistula and fissure—			
Incision and curetting fistula	16	..	
Incision of fissure	7	..	
79. Abdominal pain—			
Laparotomy	17	..	Negative results in all cases.
Cystoscopy	5	..	
Nephrotomy	1	..	
Appendicectomy	6	..	
Posterior gastro-enterostomy	3	..	
Closure of gastro-enterostomy	2	..	
Sigmoidoscopy	7	..	*Nil* abnormal seen.
82. Dyspepsia—			
Laparotomy	2	..	Negative results.
83. Dysphagia—			
Œsophagoscopy	3	..	No organic cause for obstruction found.
85. Abdominal, various—			
Colopexy for visceroptosis	13	..	
Excision of abdominal hydatids	1	..	
Incision of retro-peritoneal sarcoma	1	2	
Laparotomy for general carcinomatosis of peritoneum	7	1	Colostomy performed in 2 cases.

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
86. Foreign bodies in intestinal tract—			
Removal *viâ* œsophagoscope	9	..	
Laparotomy . . .	1	..	
87. Salivary glands—			
Incision for parotitis .	6	..	
Excision of calculi . .	2	..	
Excision of endothelioma .	4	..	
Aspiration of sarcoma .	1	..	
Implantation of radium .	7	..	For carcinoma in all cases.
Excision of parotid (carcinoma)	1	..	
88. Cirrhosis of liver—			
Talma Morrison's operation	2	..	
89. Cholelithiasis—			
Cholecystectomy . .	29	2	Also appendicectomy, 13 cases ; nephropexy, 2 cases ; and colopexy, 1 case.
Cholelithotomy and drainage	15	2	
Choledocholithotomy and drainage	2	..	
90. Cholecystitis—			
Cholecystectomy . .	14	..	
Cholecystostomy . .	4	1	
Laparotomy for carcinoma of gall-bladder	..	3	
Closure of biliary fistula .	3	..	
92. Pancreas—			
Cholecysto-gastrostomy .	1	3	
Cholecystenterostomy .	..	1	
Laparotomy . . .	1	..	
Gastrotomy . . .	1	..	For removal of Murphy's button, used at previous operation.
93. Digestive, various—			
Drainage of tropical abscess of liver	1	..	
95. Tuberculous peritonitis—			
Laparotomy . . .	3	..	Appendicectomy, 2 cases.
96. Peritoneum various—			
Laparotomy and division of adhesions	10	..	With gastro-enterostomy, 2 cases ; appendicectomy, 3 cases ; and pyloroplasty, 1 case.
Laparotomy for general peritonitis	1	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
97. Hernia—			
(1) Inguinal—			Also orchidopexy, 3 cases; orchidectomy, 4 cases; appendicectomy, 4 cases; excision of varicose veins, 7 cases; and evagination of tunica vaginalis, 15 cases.
(*a*) Reducible—			
Herniotomy, ligature of sac	112	..	
Closure of inguinal canal, Foster's method	169	1	
Closure of inguinal canal, Bassani's method	33	..	
Closure of inguinal canal, filigree method	1	..	
(*b*) Irreducible, herniotomy, ligature of sac	2	..	
Closure of inguinal canal, Foster's method	12	..	
(*c*) Strangulated, herniotomy, ligature of sac	3	1	Fatal case resection of gangrenous intestine.
Closure of canal, Foster's method	11	..	
Closure of canal, Bassini's method	3	..	
(*d*) Recurrent, ligature of sac	4	..	
Herniotomy, Foster's operation	6	1	
Herniotomy, celluloid plate	1	..	
(2) Femoral—			
(*a*) Reducible—			
Herniotomy, ligature of sac	1	..	
Herniotomy, Poupart's ligament to pectineus—			
Femoral route	20	..	
Inguinal route	6	..	
(*b*) Irreducible—			
Herniotomy, Poupart's ligament to pectineus—			
Femoral route	10	..	
Inguinal route	9	..	
(*c*) Strangulated—			
Herniotomy, Poupart's ligament to pectineus—			
Femoral route	14	1	Resection of gangrenous intestine and anastomosis in one case; recovery.
Inguinal route	4	..	
Herniotomy with plastic reconstruction	1	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
97. Hernia—*continued.*			
(2) Femoral—*continued.*			
(*d*) Recurrent—			
Herniotomy, Poupart's ligament to pectineus—			
Femoral route	2	..	
Inguinal route	2	..	
Herniotomy, celluloid plate	1	..	
(3) Umbilical and ventral—			
(*a*) Reducible and irreducible			
Mayo's operation	26	2	
Lateral suture	1	..	
Plastic repair	7	..	
(*b*) Strangulated—			
Mayo's operation	3	1	
Plastic repair	1	..	
(*c*) Recurrent—			
Mayo's operation	4	..	
(4) Various—			
R.C. for interstitial hernia	2	..	
98. Adenitis—			
(*a*) Simple excision	8	..	
Incision and curettage	1	..	
(*b*) Tuberculous excision	73	..	
Incision and curettage	23	..	
Aspiration	9	..	
Exploratory laparotomy	1	..	
99. Adenitis, carcinomatous—			
Excision	5	..	Radium implanted in 4 cases.
100. Adenitis, various—			
Excision of lymphoma	1	..	
,, of sarcoma	2	..	
102. Exophthalmic goitre—			
Partial thyroidectomy	35	2	
103. Thyroid—			
Enucleation of adenoma	17	..	
Hemithyroidectomy	27	1	
Thyroidectomy for carcinoma	1	..	
104. Ductless glands, various—			
Splenectomy	3	..	
105. Breast—			
(*a*) Simple—			
Excision of adenoma	15	..	
,, of papilloma	2	..	
,, of chronic mastitis	28	..	
,, of tuberculous ,,	1	..	
Plastic amputation for hypertrophy	1	..	

Table II—*continued.*

Disease and Operation.	Result.		Remarks.
	Dischd.	Died.	
105. Breast—*continued.*			
(*b*) Malignant—			
Amputation and excision of glands	8	..	Also hysterectomy, 1 case.
Amputation with pectorals and excision of glands	42	2	
Local excision . . .	11	..	
Section of brachial plexus .	1	..	
Excision of clavicle for secondary deposit	1	..	
106. Testicle, undescended—			
Scrotal reposition . .	1	..	
Abdominal reposition .	2	..	
Orchidectomy . . .	2	..	
107. Testicle, various—			
Orchidectomy for torsion .	1	..	
,, for hernia testis	1	..	
,, for tubercle	16	..	
,, for carcinoma	3	..	One case with invasion from carcinoma of scrotum.
Epididymectomy . .	1	..	
Drainage of abscess . .	1	1	
108. Tunica and processus vaginalis			
Excision of tunica vaginalis for hydrocele	19	..	
Eversion of tunica vaginalis for hydrocele	24	..	
Excision of hydrocele of cord	9	..	
,, of spermatocele .	2	..	
,, of carcinoma of cord	1	..	
Orchidectomy for hæmatocele	1	..	
109. For diseases of the ovary—			
Removal of 1 ovary . .	24	..	
,, of both ovaries .	4	3	
Exploratory laparotomy .	12	..	
Broad ligament cysts .	3	..	
110. For diseases of the Fallopian tube—			
Removal of 1 tube . .	8	..	
,, of both tubes .	11	..	
Exploratory laparotomy .	1	1	
111. For ectopic gestation—			
Removal of 1 tube . .	13	1	
Partial removal of 1 tube .	1	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
112. For menstrual disorders—			
Dilatation and curetting	74	..	
Subtotal hysterectomy	1	..	
Complete hysterectomy	3	..	
113. For varying types of abortion—			
Uterus evacuated	17	2	
114. For diseases of the body of the uterus—			
Dilatation and curetting	8	..	
Supra-vaginal hysterectomy	26	1	
Complete hysterectomy	29	1	
Myomectomy	17	..	
Removal of polypi	16	..	
115. For diseases of the cervix—			
Wertheim's operation	5	..	
Curettage and radium	24	..	
Complete abdominal hysterectomy	6	..	
Laparotomy	1	..	
Removal of polypi	13	..	
Repair of cervix	6	..	
116. For pelvic inflammation—			
Laparotomy and drainage	2	..	
Incision and drainage	..	1	
117. For diseases of vagina and vulva—			
Excision of new growths	14	..	
Repair of fistulæ	2	..	
Excision of vaginal septa	4	..	
118. For ruptured perineum.	7	..	
119. For prolapse and displacements			
Posterior colpo-perineorrhaphy	29	..	
Anterior colporrhaphy	14	..	
Amputation of cervix	8	..	
Ventral suspension	7	..	
Ventral fixation	3	..	
Vaginal hysterectomy	1	..	
Subtotal abdominal hysterectomy	1	..	
Le Fort's operation	1	..	
120. For genital, various—			
Dilatation and curetting	5	..	
121. Moveable kidney—			
Nephropexy	5	..	
122. Renal calculus and colic—			
Nephro-lithotomy	3	1	
Pyelolithotomy	8	1	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
122. Renal calculus and colic—*continued.*			
Removal of ureteric calculus	3	..	Extra-peritoneal by abdominal incision.
Cystoscopy	24	..	
Nephrectomy	2	..	
Nephropexy	1	..	
Nephrotomy	1	..	
Cystotomy	1	..	
123. Hydronephrosis—			
Cystoscopy	6	..	
Ligature and division of aberrant artery	1	..	
Pyeloplasty	1	..	
Nephropexy	1	..	
Nephrectomy	1	..	
124. Pyonephrosis—			
Nephrectomy	1	..	
125. Kidney and ureter, various—			
Lumbar drainage of perinephric abscess	4	..	
Lumbar nephrectomy for tuberculous disease	6	1	
Lumbar nephrectomy for cystic kidney	2	..	
Lumbar nephrectomy for carcinoma of kidney	..	2	One abdominal, 1 lumbar.
Lumbar nephrectomy for hypernephroma	2	..	
Exploratory nephrotomy .	4	1	Carcinoma, 1 ; cystic kidney, 2 ; pyelitis, 1 ; tubercle, 1.
Cystoscopy	15	..	
Excision of larynx for secondary carcinoma	..	1	P.M. Primary growth found in kidney.
127. Chronic nephritis—			
Decortication of kidneys .	2	..	In both cases to relieve hæmaturia.
128. Vesical calculus—			
Supra-pubic lithotomy .	6	..	In 1 case stones in diverticulum.
Removal by urethra . .	1	..	
129. Vesical, various—			
Cystoscopy	22	..	For carcinoma, tubercle and cystitis.
Closure of vesico-vaginal fistula	1	..	
Excision of papilloma .	12	..	2 cases recurrent.
Defulgurisation of papilloma	1	..	
Supra-pubic drainage for cystitis	2	1	
Supra-pubic drainage for carcinoma	2	2	

Table II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
129. Vesical, various—*continued.*			
Supra-pubic excision of carcinoma	1	1	
130. Prostate—			
(*a*) Adenoma, supra-pubic prostatectomy	10	1	
Supra-pubic drainage and subsequent prostatectomy	9	1	
Supra-pubic drainage only	10	4	
Closure of recto-vesical fistula	1	..	Following prostatectomy with perinæal drainage.
(*b*) Carcinoma, supra-pubic cystostomy	2	..	
Supra-pubic drainage and subsequent prostatectomy	1	..	
(*c*) Fibro-sarcoma, supra-pubic prostatectomy .	1	..	
131. Urethra and external genitalia			
Circumcision	27	..	
Excision of urethral papilloma	1	..	
Excision of urethral calculus	1	..	
Amputation of penis for carcinoma	6	1	With excision of glands in 6 cases.
132. Urethral stricture—			
Dilatation with sounds .	37	3	
Supra-pubic cystostomy .	6	1	
Internal urethrotomy .	1	..	
External urethrotomy .	3	..	
Incisions for extravasation of urine	1	..	
133. Urinary, various—			
Cystoscopy . . .	10	..	
135. Bursæ and tendons—			
Excision of prepatellar bursa	15	..	
,, of semimembranosus bursa	6	..	
,, of olecranon bursa	1	..	
,, of subdeltoid bursa	2	..	
,, of subsartorial bursa	1	..	
,, of bicipital (cruris) bursa	1	..	
,, of Baker's cyst, popliteal	1	..	
Incision and drainage of prepatellar bursa	10	..	
Incision and drainage of olecranon bursa	3	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
135. Bursæ and tendons—*continued.*			
Incision and drainage of bunion	1	..	
Excision of ganglion . .	3	..	
Excision for teno-synovitis	4	..	
Incision and drainage for teno-synovitis	2	..	
Excision of fibro-sarcoma .	1	..	In tendon sheaths at ankle.
136. Periostitis—			
Incision and drainage .	6	..	
137. Osteomyelitis—			
Linear osteotomy and drainage	8	2	
Curettage for chronic osteomyelitis	9	..	
Muscle graft for chronic osteomyelitis	1	..	
Sequestrotomy for chronic osteomyelitis	3	..	
Incision and curettage, Brodie's abscess	8	..	Of tibia 7 ; ulna 1.
138. Osteitis—			
Incision and curettage .	2	..	
Excision by trephine .	1	..	For osteoplasia of skull.
Incision and drainage .	2	..	
139. Caries—			
(*a*) Spinal—			
Albee's operation	1	..	
Incision and curettage psoas abscess	5	..	
(*b*) Various—curettage .	5	..	
Sequestrotomy . .	1	..	
140. Necrosis—			
Sequestrotomy . .	27	..	
Amputation . . .	2	..	Syme's, 1 ; of toe, 1.
141. Tumours of bone—			
Removal of osteoma . .	6	..	
,, of fibroma .	1	..	
,, of lipoma (parosteal)	1	..	
	1	..	
Amputation for sarcoma .	2	..	Of thigh (circular), 1 ; interscapular-thoracic, 1.
Incision of secondary carcinoma	1	..	
142. Bone, various—			
Guttering of tibia . .	1	..	For osteitis deformans.
Laminectomy . . .	1	..	For hydatid disease of spinal column.

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
143. Affections of amputation stumps—			
Reamputation for conical stump	2	..	
Reamputation for painful stump	2	..	
Excision of neuroma .	1	..	
,, of head of fibula .	1	..	
Sequestrotomy . .	1	..	
DISEASES OF JOINTS.			
144. Shoulder—			
Sequestrotomy for tuberculous disease	1	..	
145. Elbow—			
Arthroplasty . . .	2	..	
146. Wrist—			
Excision for tuberculous disease	1	..	
Amputation for tuberculous disease	1	..	
147. Hip—			
(*a*) Tuberculous—			
Arthroplasty . . .	1	..	
Osteotomy of femur . .	4	..	
Curettage of sinus . .	4	..	
Amputation at hip-joint (Furneaux-Jordan) .	1	..	
(*b*) Various—arthrodesis .	3	..	For osteoarthritis.
Osteotomy of femur .	2	..	
Drainage	2	..	
149. Knee—			
(*a*) Tuberculous—			
Excision	4	..	
Arthrotomy . . .	1	..	
Amputation of thigh . .	1	..	
(*b*) Internal derangement—			
Excision of external cartilage	2	..	
,, of internal cartilage	15	..	Transpatellar root in 1 case.
,, of loose body .	3	..	,, ,, 2 cases.
(*c*) Various—excision . .	1	..	For osteoarthritis.
Arthrotomy . . .	2	..	
Movements under anæsthesia	2	..	
150. Ankle and tarsus—			
Incised and curetted .	6	..	
Symes amputation . .	2	..	For tubercle.
151. Joints, various—			
Erasion of acromio-clavicular	1	..	

Table II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
152. Talipes—			
Osteotomy	1	..	
Arthrodesis	1	..	
Tenotomy	12	..	
Tenoplasty	5	..	
153. Torticollis—			
Tenotomy (open)	9	..	
154. Genu valgum and varum—			
Osteotomy	3	..	
155. Cicatricial contractures—			
Plastic operation	1	..	
156. Hammer toe—			
Excision of phalanx	4	..	
Amputation	4	..	
Osteotomy	1	..	
157. Pes planus, etc.—			
Tenotomy and tendon transplantation for pes cavus	3	..	
Excision head of metacarpal for hallux valgus	20	..	
158. Deformities, various—			
Excision of fascia for Dupuytren's contracture	4	..	
Osteotomy for curved tibiæ	3	..	
Osteoclasis for curved tibiæ	5	..	
Tenotomy	10	..	In 3 cases for Erb's palsy.
Osteotomy for coxa vara	2	..	
Resection 1st costal cartilage	1	..	
Amputation of toe	1	..	
159. Hare-lip and cleft palate—			
Plastic for hare-lip	12	..	Rose 4 cases; Mirault 1 case.
Langenbeck for cleft palate	12	..	
Lane's operation for cleft palate	1	..	
Replacement of prognathion	2	..	
160. Malformations, head and neck			
Excision of thyro-glossal duct cysts	6	..	
Excision of cervical ribs	5	..	
161. Malformations of trunk—			
Plastic for hypospadias	4	..	
162. Malformations of limbs—			
Plastic for syndactyly	1	..	
Lorenz reduction of congenital hip	4	..	
163. Chronic otitis media—			
Complete mastoid and graft	61	2	
Complete mastoid	1	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
163. Chronic otitis media—*continued.*			
Antrotomy . . .	5	..	
Drainage of cerebral abscess	2	2	One fatal case also sinus thrombosis and pyæmia.
164. Acute mastoiditis—			
Antrotomy and drainage .	55	2	
Subsequent complete mastoid and graft	3	..	
Parcentesis membranæ tympani	1	..	
Incision of abscess . .	3	..	
165. Auditory, various—			
Antrotomy, exploratory .	2	..	
Antrotomy and partial excision of mastoid carcinoma	1	..	
Excision of carcinoma of meatus	1	..	
Plastic on meatus . .	1	..	
Extraction of foreign body from meatus	1	..	
169. Cerebral, various—			
Craniotomy for hydrocephalus	1	3	In 1 fatal case plastic on choroid plexus.
172. Epilepsy—			
Craniotomy for Jacksonian	1	..	Due to glioma, which was not removable.
175. Hemiplegia—			
Stöffel's neurectomy . .	4	..	For plastic hemiplegia.
Division of pronator radii teres	1	..	,, ,, ,,
177. Intracranial tumours—			
Craniotomy and decompression	2	2	Fibroma 8th nerve, 1 case.
Craniotomy and excision .	4	1	Tuberculoma, 1; glioma, 2; pituitary tumour, 1.
179. Meningitis—			
Antrotomy and craniotomy	..	1	
180. Paraplegia—			
Lamnectomy . . .	2	..	
Tenotomy tendo Achillis .	1	..	
181. Neuralgia—			
Partial excision Gasserian ganglion	1	..	
Injection of alcohol into fifth nerve	4	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
185. Spinal, various—			
Laminectomy and excision spinal tumour	2	..	
Laminectomy and drainage serous cyst	..	1	
186. Injuries to head—			
(*a*) Fractured skull—			
Craniotomy . . .	4	..	
Implanting celluloid plate .	1	..	
Plating fractured jaw .	1	..	
Removal of peg from jaw .	1	..	
(*c*) Scalp wounds, suture .	4	..	
(*d*) Various wounds, suture .	5	..	
187. Injuries to neck—			
Suture cut throat . .	3	..	
Excision of metal . .	1	..	
188. Injuries to upper limb—			
(*a*) Fractured humerus—			
Open reduction fractured neck	4	..	
Open reduction fractured lower end	7	..	
Intra-medullary pegging .	2	..	
Plating	1	..	Also with suture musculo-spiral nerve.
Excision of elbow . .	1	..	Ankylosis after T fracture.
(*b*) Fractured radius and ulna—			
Intra-medullary peg . .	8	..	
Open reduction . .	5	..	
Excision head radius. .	2	..	
Osteotomy for old Colles' fracture	3	..	
Wiring fractured olecranon	4	..	Kangaroo tendon, 1; suture of aponeurosis, 1.
Arthroplasty for fr. styloid process	1	..	
Plating of ulna . .	1	..	
(*c*) Other fractures—			
Pegging fractured phalanx	1	..	
Excision fractured scaphoid	3	..	
,, ,, Os magnum	1	..	
Amputation crushed thumb	1	..	
(*d*) Soft parts, tendon suture.	9	..	
Amputation crushed fingers	5	..	
Freeing brachial plexus .	1	..	
Excision of foreign body .	2	..	
(*e*) Dislocations: excision, semilunar	1	..	

Table II—*continued.*

Disease and Operation.	Result.		Remarks.
	Dischd.	Died.	
188. Injuries to upper limb—*continued*—			
Plastic for recurrent dislocation, shoulder	4	..	Deltoid sling, 2; Claremont, 1; arthrodesis, 1.
Reduction dislocated thumb	3	..	Tenotomy of glenoid ligament, 2; open, 1.
189. Injuries to thorax—			
Wiring costal cartilage .	1	..	
190. Injuries to abdomen—			
Laparotomy	2	..	Suture of intestine in one case.
191. Genito-urinary injuries—			
Suture of ruptured urethra	2	..	
,, ,, vagina .	1	..	
193. Injuries, lower limb—			
(*a*) Fractured femur, plating .	4	..	
Adam's bone clip . .	..	1	
Removal of plates . .	2	..	
Osteotomy for old fracture .	1	..	
(*b*) Fractured patella, wired .	9	..	
Purse-string around . .	1	..	
(*c*) Fractured tibia and fibula, plating	3	..	
Adam's bone clip . .	1	..	
Amputation . . .	1	1	
Tenotomy tendo Achillis .	2	..	For subsequent pes equinus.
(*d*) Soft parts, suture . .	8	1	
Amputation . . .	1	..	
Excision foreign body .	11	..	
194. Injuries to back—			
Excision of fractured coccyx	1	..	
195. Injuries, joints—			
Arthrotomy of shoulder .	1	..	
Excision of meniscus temporo-mandibular	1	..	
196. Injuries to nerves—			
Suture	1	..	
Transposition of ulna .	1	..	
Tenotomy for Volkmann's contracture	1	..	Of pronator radii teres.
Freeing and wrapping in celluloid	2	..	For causalgia.
197. Mal- and ununited fractures—			
Pegging	2	..	
Osteotomy	3	..	
Plating	1	..	
Excision head of bone .	1	..	

AN INQUIRY INTO THE RESULTS OF THE OPERATIVE TREATMENT OF INTERNAL DERANGEMENT OF THE KNEE-JOINT (1912-1921).

By PHILIP H. MITCHINER, M.S.Lond., F.R.C.S.Eng.,
Surgeon with Charge of Out-Patients.

For the purposes of this inquiry all cases of internal derangement of the knee-joint operated on in St. Thomas's Hospital during the preceding ten years—*i. e.* 1912–1921—have been circularised, and requested to attend hospital for inspection, or if unable to attend personally, to write a truthful account of the present condition of the knee, and a brief history of its progress since operation.

Statistical Notes.

The total number of cases of internal derangement operated on in the period covered by the inquiry is two hundred and twenty five (225); to all of these cases inquiries were addressed, and replies were received from one hundred and thirty four (134), or approximately sixty per cent. (60 per cent.). Of this number, between eighty and ninety attended for inspection, and were carefully examined as to physical condition of both joint and limb, subjective and objective symptoms, and in most cases by radiographic examination also. The condition of the other joints, especially with regard to osteoarthritic changes, was noted in every case.

Of the total number of cases one hundred and eighty-two (182) were males and fourty-three (43) females, or a proportion of four males to one female. It is further of some interest to note that there is no increase in the number of female cases in the last five or six years, which the entry of women into more strenuous occupations might have led one to expect.

Only one fatal case occurred in the series, that of a man from whose joint two loose bodies were extracted, and who three days later developed a suppurative arthritis of the knee, with subsequent pyæmia and death on the tenth day, in spite of the fact that the affected joint was removed almost as soon as suppuration manifested itself.

CLASSIFICATION.

In regard to the various types of internal derangement met with, the following classification has been adopted, based on the appearances found in the joint at operation :

(*a*) Loose body in the knee-joint.
(*b*) Torn or displaced semilunar cartilage (only including those cases where actual evidence of lesion was observed at operation).
(*c*) Hypertrophied synovial fringes.
(*d*) No definite intra-articular lesion found.
(*e*) Torn crucial ligaments.

For purposes of brevity these various types will be alluded to as groups *a*, *b*, *c*, *d* and *e* throughout the remainder of this article.

RELATIVE FREQUENCY.

The relative frequency of these lesions was found in this series to be as follows :

Total 225	A, 39	or a	percentage	of	17·3
	B, 125	,,	,,	,,	55·5
	C, 27	,,	,,	,,	12·0
	D, 30	,,	,,	,,	13·3
	E, 4	,,	,,	,,	1·8

It will thus be seen that Group B cases more than equalled the total of all other groups together. and it is to be regretted that a further subdivision of this group into tears of the semilunar cartilage and of the coronary ligament (with displacement of the cartilage) was not carried out.

OPERATION INCISIONS.

Two operative routes had been used in opening the knee-joint : (i) a lateral incision over the affected cartilage, either transverse or vertical in direction ; (ii) a vertical medial incision with longitudinal splitting of the patella. Inasmuch as only the former incision was used until 1914, it is perhaps unfair to make a comparison of the results achieved by these two operative routes; the following observations may nevertheless prove of interest and value.

For the purposes of operation there is no doubt that the transpatellar route allows of a much more efficient view of the joint for exploratory purposes, and furthermore admits of the complete removal of the semilunar cartilages—a point of some importance in view of the fact that in over five per cent (5 per cent.) of cases, subsequent trouble resulted from the posterior fragment of the semilunar cartilage left *in sitû* after removal of the major part through the lateral incision, trouble which, moreover, was cured by subsequent excision of the remaining portion in many such cases.

This remaining portion tended to calcify and act as a source of irritation, and frequent effusions into the knee-joint, subsequently forming a starting-point for osteo-arthritic changes, or a source of a loose body.

In regard to the immediate after results of operation—and this period covers, as is shown later, one of over twelve months' duration—there is no doubt that the knee opened by the transpatellar route is more painful and more liable to effusion, and one might think, therefore, more apt to be the seat of lasting after-complications ; but this is not borne out by this investigation. The ultimate results are, if anything, more satisfactory after the transpatellar operation, no impairment of movement has been noted, and the risk of subsequent trouble from osteo-arthritic changes is certainly no greater; indeed in cases where the semilunar cartilage needs removal it is less, as has been pointed out above, than after operation by the lateral route.

A large number of patients operated on by the lateral route, moreover, complain of complete loss of sensation over the head of the tibia and around the ligamentum patellæ, with, in some cases, tingling and pain on kneeling—a symptom which is still present as long as ten years after operation. Examination shows there is, in many cases, a definite area of anæsthesia over the inner condyle of the tibia, and a larger area around where only protopathic sensation is present.

These phenomena, although not in any case accompanied by clinical trophic lesions of the skin, are a source of discomfort to the patient, and inasmuch as they are due to section of the internal cutaneous branch of the anterior crural nerve (mediocutaneous branch of femoral nerve) at the site of operation, can easily be avoided by use of the transpatellar route.

RESULTS OF THE INQUIRY.

The actual results in the one hundred and thirty-four cases (134) from whom replies were received, or whom were examined, are appended in the following table, where the results in each group have been shown under the following headings :

(1) *Good.*—Where the patient not only has no complaint to make of the joint, and is able to obtain full use on all occasions with no untoward results, but also writes or uses expressions with regard to the success of the operation, such as "the operation was an unqualified success," "I have not had any trouble with my knee since operation," and "I have never had cause to think of my knee since," etc.

(2) *Fair.*—Where the joint, although giving no trouble during the patient's ordinary everyday life, yet gives pain or has an effusion as the result of over-exertion.

(3) *Unsatisfactory.*—Where the joint is in the same condition as before operation, is a continual source of trouble from pain and effusion, or is even worse than before operation.

It may be urged against this method of classifying results that no account has been taken of the actual results of clinical examination, and in reply to this it must be admitted that several cases in which a certain amount of post-operative osteo-arthritic change was present have been included under the heading "good," the defence being that such patients made no complaint of this condition up to the time of, or at the enquiry; and as surely the result from the patient's standpoint is most important, it was considered that this was the most satisfactory method of classification, a further point in its favour being the fact that only eighty-seven of the hundred and thirty-four cases included actually presented themselves for examination.

Group.	Total.	Results.					
		Good.		Fair.		Unsatisfactory.	
		Number.	Percentage.	Number.	Percentage.	Number.	Percentage.
A	23	14	60·9	5	21·7	4	17·4
B	74	57	76·7	14	19·2	3	4·1
C	16	6	37·5	7	43·8	3	18·7
D	18	5	27·7	3	16·8	10	55·5
E	3	2	66·6	1	33·3	—	—
Total	134	84	62·7	30	22·4	20	14·9

It will thus be seen that the percentage of good results in the series is 62·7 per cent., fair 22·4 per cent., and unsatisfactory 14·9 per cent. ; moreover the best results (76·7 per cent. good in Group B) were obtained where definite lesions of the semilunar cartilages were present, and the worst (55·5 per cent. unsatisfactory in Group D) where no definite lesion was observed, and where, in spite of the joint being apparently normal, the semilunar cartilage was excised at operation (see remarks on Group D below).

The joint was definitely worse in two cases only : in one where a loose body had been removed from an osteo-arthritic joint in 1912 there was now very marked osteo-arthritis, and seven loose bodies in the joint. It may be remarked in passing that this patient was regularly employed in carrying loads up ladders, and was in the habit of " putting his knee in again " when it locked—which it did frequently ! The second case was one in Group D, where, in spite of no definite lesion being seen, the internal semilunar cartilage had been removed, there was a complete flail joint, due to laxity or atrophy of the crucial and other ligaments, and the joint could be dislocated in all directions ; the limb was much wasted and the man could only get about when using a knee-cage.

NOTES ON CASES IN THE VARIOUS GROUPS.

There was nothing particular of note in Group A, save perhaps the greater tendency of these cases to develop osteo-arthritic changes.

In Group B sixty-nine of the cases (69) showed lesion of the internal and four (4) of the external semilunar cartilage—a proportion of approximately seventeen to one in favour of the internal cartilage in frequency.

In regard to Group C, it is interesting to note that subsequent to operation five cases developed tuberculous disease either in the joint itself or elsewhere in the body, and that in all these cases the joint still gives trouble.

Three cases in Group D developed renal disease and one diabetes, and it seems probable that in these cases the synovial thickening was of a toxic nature, and comparable to the toxic œdema of shins met with in such cases. One case developed acute nephritis immediately after operation, and in this case the change was assuredly of this nature; this man now reports that at present both his renal and knee conditions are quiescent, but that exacerbations of renal trouble are frequently accompanied by swelling in the knee-joint.

It is furthermore a noteworthy fact that although amongst the eighteen cases traced in this group, in only four was the surgeon content to close the joint on nothing abnormal being found, yet these four cases are included among the five "good" results, the remaining good case being one in which hypertrophied synovial membrane was removed only. the remaining thirteen cases, in which the internal semilunar cartilage was partly or entirely excised, having all given subsequent trouble.

Only three of the four cases comprising Group E can be traced. The fourth case was of great interest in that wire loops were inserted to replace a hopelessly disrupted posterior crucial ligament, and it is to be regretted this case cannot be traced.

Among the whole two hundred and twenty-five cases only two joints suppurated, one being the fatal case, quoted elsewhere, and the other following a hæmatoma in the joint. This latter case was treated by daily gauze packing, and now three years after operation the patient is able to follow his occupation and has a useful limb, with about fifty per cent. movements at the knee-joint and only very slight lateral mobility.

CLINICAL NOTES ON CASES EXAMINED.

Post-operative osteo-arthritic changes, or aggravation of the osteo-arthritic changes noted in the joint at operation, as judged by comparison with the opposite knee-joint, were noted in fifty per cent. (50 per cent.) of the cases examined; it is, however, of interest to find that in many cases where marked signs of such changes were present the patient neither complained of nor had noted any disability in the joint; indeed, in only about twelve per cent. (12 per cent.) of these cases was any complaint made by the patient.

In no case was the change sufficient to entirely cripple the patient. In several cases where no complaint was made X-ray examination showed linear calcification in the remains of the posterior part of the internal semilunar cartilage, which is therefore a presumable source of trouble.

It was not found that the cases treated by the transpatellar route showed any greater percentage of arthritic changes, or any greater severity of changes, than those met with in joints opened by the lateral incision, although several of the latter type of cases dated back to 1912, as against 1914 only for the former.

Pain and effusion in the joint subsequent to operation, occurring in attacks and following unusual or undue exertion on the part of the patient, was noted or complained of in nearly all cases operated on in the last three years, *i. e.* 1919–20–21. This led to inquiry being made among all the other patients operated on at earlier dates where no such complaint was now made, and it was elicited that in the majority of these cases, now quite cured, pain and effusion in the knee-joint had occurred on exertion for from two to three years after operation, and that in many cases this effusion had taken considerable time to absorb. Such unwelcome occurrences became less frequent towards the end of the second year after operation, and then ceased, so that from the third year onward the patient could indulge in all forms of exercise without any untoward results.

In those cases where the joint had been fixed by splinting for any length of time after operation there was frequently marked and persistent muscular wasting around the joint, and in all such cases the convalescence had been much prolonged, and the period during which attacks of pain and synovial fluid effusions were liable to occur was protracted, or even permanent.

Only in the case where hæmarthrus and subsequent suppuration supervened was any ill-effect noted from non-fixation of the joint after operation, and early movement and light massage or faradic electrical treatment seemed to have benefited the patients in promoting rapid absorption of effusions, amelioration of pain, and normal return of tone to the muscles around the joint.

Lastly it was found that most of the women and many of the men (who as policemen had to take part in physical drill) complained of pain when the knee was in extreme flexion, as on kneeling, or squatting back on the heels, and inability to start rising from these positions. In all cases where this disability was complained of there were osteo-arthritic changes in the joint, though in the majority nothing else was complained of except the pain on flexion.

CONCLUSIONS.

It would appear that the following conclusions can be drawn from the facts elicited in the examination of the foregoing series of cases:

(1) That as regards the actual route selected at operation, the transpatellar is the most satisfactory in all respects.

(2) That no method of splinting is necessary or advisable to secure fixation of the knee after operation, early movement combined with electro-therapeutic measures being beneficial in promoting early absorption of effusions.

(3) That the full benefit of the operation is not to be expected for from two and a half to three years after its performance.

(4) That those cases where a definite lesion of the intra-articular structures is present give far more satisfactory results (76·6 per cent. in cases of damage to semilunar cartilage, and 60·9 per cent. in those of loose body), after operation, than where no definite lesion can be found (37·7 per cent with synovial fringes and only 27·7 per cent. where no lesion is seen at operation).

(5) That when nothing abnormal is found on the joint being opened, the best course to adopt is to close the joint without interfering with the intra-articular structures.

On reviewing the whole of the facts set forth in the foregoing article, it would seem that operative interference in cases of internal derangement of the knee is justifiable if not indeed desirable in all such cases where the diagnosis of a definite lesion of any of the intra-articular structures can be hazarded with any degree of certainty, and where the consequent disability is sufficient to prevent the patient carrying out efficiently his or her daily avocation.

REPORT OF MARY WARD.

WITH SPECIAL TABLES OF PLACENTA PRÆVIA, ECLAMPSIA, AND ALBUMINURIA OF PREGNANCY.

By A. H. RICHARDSON, M.A., M.B., B.Ch.Cantab.,
F.C.R.S.Eng.,
OBSTETRIC REGISTRAR.

There were 649 cases admitted to the ward during the year, and of these 607 were delivered, 37 discharged undelivered, and 5 were delivered before admission. 441 were primigravidæ and 208 multiparæ.

There were 518 cases of normal labour. Of these 491 were vertex presentations—L.O.A. 304, R.O.A. 173, R.O.P. 12 (4 unreduced), L.O.P. 5 (1 unreduced); 14 were breech presentations—L.S.A. 4, R.S.A. 4, R.S.P. 2, L.S.P. 3, footling (double) 1; 7 were twin pregnancies, all vertices; 1 was a case of triplets, 2 footlings and 1 transverse; 2 women were delivered in the receiving room.

616 children were born during the year.

Males:	273 mature,	7 of which were stillborn and	1 died.
	52 premature	14 ,, ,, ,,	11 ,,
Females:	253 mature	10 of which were stillborn and	2 died.
	38 premature	9 ,, ,, ,,	

Of the abnormal cases there were:

Eclampsia.—6 cases: 4 ante-partum, 1 intra-partum, 1 post-partum. All the mothers recovered; one child was macerated and one was stillborn. (*See separate table on p.* 104.)

Albuminuria.—11 cases, 8 of whom were delivered in hospital and 3 discharged undelivered. 2 cases not included developed eclampsia while in hospital and are included under the latter. Of the 9 cases delivered in hospital, 2 children were macerated and 1 stillborn.

Hyperemesis Gravidarum.—11 cases, 7 of which were mild and cleared up very quickly on rest, dieting and careful attention to the bowels. 3 cases where a trace of albumen was found in the urine and a small amount of acetone. These also did well on the above treatment. One severe case, 6 months pregnant, where the ammonia coefficient was 26·5 per cent. and albumen and a trace of blood were found in the urine. This patient was treated by rectal injections of glucose and bicarbonate of soda and eventually cleared up. In no case was induction of abortion necessary.

PLACENTA PRÆVIA.—13 cases—3 central, 5 lateral, 5 marginal. There were 2 maternal deaths, both from post-partum hæmorrhage. 7 of the children were stillborn. (*See table on p.* 103.)

ACCIDENTAL HÆMORRHAGE.—3 cases—1 moderate, 2 slight. One case had two small hæmorrhages before admission and was admitted with a third attack. The loss soon ceased with rest and sedatives, and she was discharged undelivered 10 days later. The urine was normal. The other case was one where a woman in her 20th week was lifting a heavy bath on to a table when she felt something " give away " and 3 hours later had a flooding. She then had repeated small losses for 10 weeks and was admitted in labour. The child, which was a living female, was 2 lb. ½ oz., and lived 5 days. In this case there was a small cloud of albumen in the urine.

In the more severe case there was considerable albuminuria and œdema of the legs. She was treated by vaginal plug, external podalic version, and a leg was brought down. The child showed early maceration.

POST-PARTUM HÆMORRHAGE.—11 cases: 5 of these were associated with retained placenta, which was in all cases removed manually, followed by injection of pituitrin and bimanual compression of the uterus. 2 cases were associated with antepartum hæmorrhage, and both cases ended fatally.

3 cases followed normal labours. In 1 case of persistent occipito-posterior presentation where forceps had failed and craniotomy was done, there was very severe post-partum hæmorrhage with intense shock. All remedies were tried but the patient died, and at the autopsy a large intra-ligamentary hæmorrhage was found.

CONTRACTED PELVIS.—16 cases, 3 treated by Cæsarian section. 13 treated by induction of premature labour. In all cases the mothers did well and 1 child only was stillborn. In one case, that of an achondroplasiac dwarf, induction of abortion was performed.

OBSTRUCTED LABOUR.—

(*a*) *Delayed Second Stage.*—16 cases; 13 of these were treated by extraction with forceps: L.O.A. 7. R.O.A. 2, R.O.P. 3 (2 unreduced; 1 of the children was stillborn), L.O.P. 1. 2 were treated by craniotomy. One of these was a persistent R.O.P. position where attempts at rotation and forceps failed. In the second case the child was already dead on admission, and the uterus in an irritated condition from unsuccessful attempts at extraction with forceps.

1 case, a persistent R.O.P., was treated, first by bimanual rotation to R.O.A., followed by forceps, which were unsuccessful, then by internal version. The child was stillborn. There was a definite degree of contracted pelvis in this case.

(*b*) *Rigidity of cervix.*—2 cases. In one case the membranes ruptured prematurely and the os dilated very slowly, the patient being in labour 4 days before admission. The cervix was dilated manually and a macerated fœtus was extracted with forceps. In the second case a very rigid œdematous lip of cervix formed. Forceps were applied, and the rim of cervix was gradually pushed up over the head as traction was applied.

(*c*) *Brow presentation.*—1 case. Converted to face presentation and forceps unsuccessful. Craniotomy. Here the diagonal conjugate was 4¼ in.

(*d*) *Transverse presentation.*—1 case. Elbow presenting. Easy internal version. Living child.

PREGNANCY, VARIOUS.

(*a*) *Cardiac disease*, 6 cases. Mitral disease, 5 cases; 3 of these had labour terminated by forceps, 1 had labour terminated by abortion. 1 fatal case from heart failure where labour was premature.

Combined mitral and aortic disease: 1 case terminated by forceps.

(*b*) *Other diseases.*—1 case *B. coli* pyelitis with premature labour. Child lived 3 hours; pyelitis subsided rapidly. 1 case tuberculous peritonitis with active disease and marked pyrexia from 6½ months onwards; labour terminated naturally and the patient was transferred to a sanatorium. 1 case with fibromyomata admitted for observation in labour. 1 case acute hydramnios, treated by perforation of membranes; triplet abortion. 2 fatal cases; one of lobar pneumonia with premature labour—living child; the other, caries of spine, after passing through a normal labour died of empyema.

(*c*) *Not delivered in hospital.*—5 cases of *B. coli* pyelitis during pregnancy treated by alkaline diuretics, vaccine etc.; 1 case of diabetes with pregnancy treated by dieting.

1 case of cystitis—*Staphylococcus aureus* in pure culture. 14 cases of normal pregnancy admitted for purposes of metabolic experiments.

RUPTURED PERINÆUM.

Primiparæ: 59 cases, all of second degree. All sutured; none complete. Multiparæ, 3 cases of second degree. sutured.

RETAINED PLACENTA AND MEMBRANES.

5 cases of adherent placenta removed manually (*see under* "Post-partum Hæmorrhage"). 7 cases of complete or partial retention of the chorion, which was in all cases passed with the lochia; 3 of the latter had slight pyrexia with offensive lochia.

MATERNAL MORBIDITY.

The following figures are based on the ground that any case which shows a temperature of over 100° F. on two occasions between the second and eighth days is morbid:—

	No. of cases.
Septicæmia	0
Sapræmia	8
Pulmonary	3
Septic perinæum	2
Cellulitis of hand	1
Scarlet fever	1
No obvious cause	3

That is to say, the total number of morbid cases is 18. As there were 607 women delivered in the ward, the percentage morbidity is 2·9.

Duration of Temperature.

Days	1	2	3	4	5	6 or over.
No. of cases	2	3	3	7	1	2

Range of Temperature.

100°–101° F.	101°–102° F.	102°–103° F.	103° F. and over.
4	8	3	3

Placenta Prævia.

Case.	Age.	Parity.	Maturity.	Variety.	Treatment and Remarks.	Result. M. C.
G. G—	34	4-para	Term	Central	Considerable hæmorrhage before admission. Hole made with De Ribes' forceps through placenta. Previous external version. Leg pulled down.	G. S.
A. R—	30	2 ,,	38 weeks	,,	Several hæmorrhages since 32nd week. Smart ditto just before admission. Ceased on admission. Cæsarian section.	G. G.
E. W—	44	9 ,,	37 ,,	,,	Admitted with severe hæmorrhage. De Ribes' bag put in through placenta, followed by internal version. Delivered without much extra shock, but continued to lose blood slowly but steadily from the lower uterine segment in spite of pituitrin, ergotin, douches, bimanual compression, packing of the uterus. Eventually died of post-partum hæmorrhage.	D. S.
L. E—	39	12 ,,	37 ,,	Lateral	Admitted with hæmorrhage at 32nd week and discharged well. Readmitted with moderate hæmorrhage. De Ribes' bag, and leg brought down when former came out.	G. G.
N. M—	40	5 ,,	Term	,,	One small hæmorrhage 2 days before labour, which started spontaneously and was accompanied by another moderate hæmorrhage. The latter ceased with the course of labour.	G. G.
E. T—	38	14 ,,	34 weeks	,,	Started end of 7th month. Bipolar version. Membranes ruptured. Leg pulled down.	G. S.
L. W—	31	4 ,,	38 ,,	,,	2 weeks before term. Smart hæmorrhage. No dilatation. Placenta felt, thought to be central. Cæsarian section.	G. G.
K. M—	28	Primip.	34 ,,	,,	Considerable hæmorrhage before admission. De Ribes' bag. Internal version. Much P.P.H. Bimanual compression. Horse serum, gum saline; uterus packed; slow steady dribble.	D. D.
N. B—	39	3-para	34 ,,	Marginal	Edge easily felt. De Ribes' bag. Internal version. Slight hæmorrhage on 3 occasions before admission.	G. S
F. B—	25	Primip.	35 ,,	,,	Slight hæmorrhage 2 weeks before admission. More severe day before admission. Ceased in hospital. Discharged after 12 days without further trouble.	— —
R. B—	34	4-para	Term	,,	Admitted with moderate hæmorrhage in labour. External version. Leg pulled down.	G. G.
E. H—	30	Primip.	36 weeks	,,	Moderate hæmorrhage for 48 hours before admission. De Ribes' bag. Spontaneous delivery. Child slightly macerated.	G. S.
D. S—	28	Primip.	Premature	,,	Moderate hæmorrhage on admission. De Ribes' bag. Internal version.	G. S.

Eclampsia.

Case.	Age.	Parity.	Maturity.	Urine.	Convulsions.	Treatment and remarks.	Result. M. C.
D. C—	23	Prim.	37 weeks	Albumen 0·8 per cent. on morning of day of 1st fit	2 fits before operation, none after. 1st fit at 2 p.m., operation 8.30 p.m.	Under treatment for pregnancy kidney in Adelaide when fits started. Diet, rest active purgation. Morphia freely and Cæsarian section.	G. G.
L. S—	33	4-para	28 weeks	Albumen considerable quantity, 0·2 per cent. Esbach	1st fit 27 , 3 . 22. Then 2 fits 31 . 3 . 22, followed by operation	Under treatment for albuminuria. It is very probable that there was some pre-existing chronic nephritis. The blood-urea the day before Cæsarian was 39 mg. per 100 c.c. and B.P. 127. There was some retinitis exudativa on both sides. After the 2nd fit morphia freely and Cæsarian section.	G. Mac.
R. R—	28	Prim.	35 weeks	After operation 0·1 per cent. Esbach	8 fits before admission, 1 in Casualty, 3 fits in ward before operation, none after	Admitted with fits. Morphia very freely. Immediate Cæsarian section. Day after operation blood-urea 40 mg. per 100 c.c. and B.P. 160 mm. 12 days after operation, no albumen.	G. S.
A. K—	41	6-para	Full	Albumen large quantity, but admitted in labour with no symptoms of toxæmia	2 fits after labour	Admitted in labour, which was spontaneous. B.P. 206 mm. Blood-urea 37 mg. per 100 c.c Papillitis. Treatment: venesection, purgations, morphia.	G. G.
E. C—	19	Prim.	Full	Albumen fair cloud on admission; acetone absent	Fits started during labour, 3 in number. One fit after delivery	No premonitory symptoms. Fits started during labour. Dilatation terminated digitally and forceps delivery. Rectal saline with glucose and bicarbonate of soda. Morphia.	G. G.
L. S—	27	2-para	32 weeks	Albumen 0·4 per cent. Esbach. Diastatic reaction 10; few hyaline casts	4 fits before operation	Eclampsia in 1st pregnancy, child stillborn, now slight exudative retinitis. Blood-pressure rose sharply from 164 to 182 just before fits. Cæsarian section. Morphia.	G. G.

Albuminuria of Pregnancy.

Case.	Age.	Parity.	Maturity.	Urine.		Remarks, treatment, etc.	Result. M. C.
				On admission.	On discharge.		
E. D—	24	Prim.	Full	Albumen 0·2 per cent. Esbach, no diuretic nor acetone	Albumen, faint trace	Œdema of legs and labiæ. Blood-pressure systolic 145 mm	G. G.
C. H—	42	11-para	Full	Albumen 1 per cent.	Albumen considerable	Albuminuric retinitis first noted when six months pregnant. Had fits with 9th child. Generalised œdema. Treated by diet and elimination methods.	G. G.
E. H—	27	Prim.	38 weeks	Albumen 0·15 per cent. Esbach, no acids	Albumen, trace	Severe vomiting all pregnancy. General œdema. Insomnia. Dimness of vision. Blood-urea 92 mg. per 100 c.c. B.P. 158. Induction with bougies. Child macerated.	G. S.
H. H—	29	Prim.	Full	Albumen 0·1 per cent. Esbach; urea concentration 4 per cent. Diastatic 10	—	Œdema general. B.P. 122. Blood-urea 11·5 mg. Slight contraction of pelvis. Twilight sleep. High forceps. Large child.	G. S.
G. H—	20	Prim.	Full	Albumen 0·6 per cent. Esbach	Albumen a trace	Congenital syphilis. Treatment. In hospital 1 week a month before confined for rest, diet, and eliminative treatment.	G. G.
E. N—	33	2-para	Full	Albumen considerable	Albumen *nil*	Admitted in labour. B.P. 150. Blood-urea 18 mg. Treatment, diet. Cleared up quickly after delivery	G. G.
E. S—	26	Prim.	32 weeks	Albumen 0·3 per cent. Esbach, no casts	Albumen, trace	Œdema of feet only. B.P. 145. Diet, rest, elimination.	G. G.
H. W—	28	Prim.	37 weeks	Albumen 0·2 per cent. Esbach. Acetone a trace	Albumen, faint trace	Œdema of feet; face puffy; vomiting excessive. Diet, rest, purgation. Fœtus macerated.	G. S.
M. C— G. C— S. A—	28 41 30	Prim. 9-para Prim.				3 mild cases who were admitted for a week each for diet, rest, and free purgation. All were discharged undelivered.	

REPORT OF

THE OUT-PATIENT OBSTETRICAL DEPARTMENT FOR 1921.

By JAMES M. WYATT, M.B., B.S.Lond., F.R.C.S.Eng.

District.

On the District in 1921 842 cases were attended. Of these, in 266 the baby was born before the arrival of the clerk. Of the remainder there were—

Vertex presentations, 540.

L.O.A.	316
R.O.A.	181
R.O.P.	29
L.O.P.	14

Breech presentations, 9.

L.S.A.	3
R.S.A.	5
L.S.P.	1

Twin presentations, 9.

Both vertex	7
Vertex and breech	2

There was 1 *brow presentation* which was converted into a face and natural delivery followed.

1 *Face presentation*, R.M.P.

Acute partum hæmorrhage.—There were 8 cases of A.P.H., 4 due to placenta prævia, 3 of which were admitted to Mary Ward, and 1 delivered satisfactorily at home.

3 slight accidental hæmorrhage treated successfully by rest.

At most 7 sent to the Infirmary.

Prolapsed cord.—1 case treated by podalic version, but the fœtus was stillborn. There were 5 other cases which were admitted to Mary Ward. 1 delayed (second stage of labour), 1 albuminuria, 2 adherent placenta, 1 complete ruptured perinæum.

Abortion.—2 cases: 1 threatened, treated successfully by rest; 1 complete.

Forceps delivery.—20 cases. Forceps were applied in 20 cases, owing to delay in the second stage of labour, but in all cases the head was well down in the pelvic cavity, and there was no great difficulty in effecting delivery.

Adherent placenta and post-partum hæmorrhage.—23 cases. In 7 of these cases the placenta had to be removed manually, and in the rest the hæmorrhage was quelled by means of hot douches and pituitary extract.

Ruptured perinæum.—51 cases. 1 complete admitted to Mary Ward, the others varied from very slight tears to more severe ones and were all sutured. A large number occurred in cases where the baby was born before the arrival of the clerk; then no restraint was put on the advancing head to protect the perinæum.

REPORT OF

THE ANTE-NATAL DEPARTMENT.

By JAMES M. WYATT, M.B., B.S.Lond., F.R.C.S.,
OBSTETRIC PHYSICIAN WITH CHARGE OF OUT-PATIENTS.

As this is the first report of the Ante-Natal Clinic, a brief outline of the work done there will be given. The majority of women who wish to be attended by the hospital during their confinement apply about the third or fourth month of their pregnancy.

These are then seen by the House Officer and the Lady Almoner and given a provisional card for either Mary Ward or the District, and told to attend for further examination about the 32nd week of their pregnancy. If, however, there has been any abnormality in their previous confinements they are seen within the next few days by the visiting physician.

In the interval between their first application and their further visit to the clinic they are visited by the Lady Almoner or her deputies, and home conditions and general life inquired into.

On their visit at the 32nd week the urine is first examined, and then a careful abdominal examination, noting general appearance, the lie of the child, and the external measurements of the pelvis taken. No vaginal examination is made unless from previous history or from abdominal examination any abnormality is noted.

If everything is normal they are told it is not necessary to come again unless they notice anything wrong themselves, but if anything abnormal is detected either in the urine or from examination they are then seen from week to week as occasion requires.

All cases showing any signs of kidney lesion are carefully examined by Dr. de Wesselow, in many cases being taken into the ward for a few days for more careful observation.

Likewise any cases giving a previous history of stillbirth have a Wassermann reaction done.

During the year 1921, 1491 mothers attended the clinic. In the majority of these patients everything was found to be normal, but the following abnormalities were detected and dealt with :

Breech presentations.—59 cases in which external version was performed, and a further examination made in from two to three weeks to ascertain that the condition had not recurred.

Transverse presentations.—18 cases, similar treatment being carried out as above.

Albuminuria.—48 cases. 9 of these were more or less severe and admitted to Adelaide Ward for detailed examination. 39 were slight and were seen weekly up to the time of their confinement.

Hyperemesis gravidarum.—16 cases. None of them were severe, but 12 were admitted to the ward, and it was found that with two or three days' rest in bed, a normal diet, and lastly, but most important, careful attention to the bowels, the condition completely subsided.

Pyelitis of pregnancy.—9 cases. In all cases the organism found was the *B. coli.* 7 were admitted for a short time, and all were treated with urinary antiseptics and vaccines, with very marked improvement.

Contracted pelvis.—16 cases. Of these 13 were admitted before term at various times according to the size of the fœtus, and pregnancy was terminated by induction of labour. In the other 3 cases Cæsarian section was performed at term.

Previous stillbirths.—20 cases. All these cases had Wassermann reactions carried out, and in 4 the result was positive and they were sent to the V.D. Department for treatment. The other cases were all admitted to Mary Ward for their confinements. 18 other cases were admitted to Adelaide Ward for observation and treatment; of these 10 were normal cases in which the kidney functions were being ascertained for the purposes of control, and of the others—

2 were for cardiac disease
1 diabetes
1 hydramnios } complicating pregnancy.
1 severe œdema of legs
3 abdominal pain

THE CHILDREN'S DEPARTMENT (MEDICAL), 1921.

By R. C. JEWESBURY, M.A., M.D., B.Ch.Oxon., F.R.C.P.Lond.

Out-Patients.

The total number of cases seen in the Out-Patient Department was 4719, with a total attendance of 20,785. These figures contrast with the year 1918, when 2927 new cases were seen and the attendance was 12,221. Cases of skin disease in children are shown in these last figures, but are excluded from the totals in 1921.

The only epidemic of note during the year was that of summer diarrhœa, which was of moderate severity, and was characterised by the frequent presence of blood and mucus in the stools. Two cases only of encephalitis lethargica were seen.

Infant Welfare Clinics.—The number of new babies seen at the clinics was 576, with a total attendance of 4150. In 1918 these figures were respectively 423 and 3395. The great majority of these infants had been born in hospital or in the hospital district.

Children's Venereal Clinic.—The average attendance at this clinic was 30. Cases of vaginitis were investigated, and if non-specific in origin were treated. Gonorrhœal vaginitis was not treated in Out-Patients, institutional treatment being obtained for each case.

Congenital syphilis was treated in the Out-Patient Department, and arrangements were made to keep these cases under observation for a long period.

IN-PATIENTS.

The total admissions to "Lilian" were 337, with a mortality of 58 cases. These were classified :

General diseases.—Anæmia gravis, 1 ; secondary anæmia, 1 ; lymphæmia, 1 ; lymphadenoma, 1 ; malnutrition, 24 ; diabetes mellitus, 1 ; measles, 4 ; scarlet fever, 1 ; enteric fever, 1 ; diphtheria, 2 ; pertussis, 5 ; erysipelas, 1 ; septicæmia, 3 ; pyrexia, 4 ; rickets, 11 ; acute rheumatism, 6 ; rheumatic endocarditis, 7 ; pericarditis, 1 ; chorea, 5 ; miliary tuberculosis, 7 ; pulmonary tuberculosis, 3 ; tuberculous peritonitis, 2 ; tuberculous adenitis, 1 ; congenital syphilis, 8 (including one case of G.P.I.).

Respiratory system.—Bronchitis, 18 ; broncho-pneumonia, 37 ; lobar pneumonia, 15 ; pleurisy, 2 ; pleurisy with effusion, 3 ; empyema, 9.

Digestive.—Tonsillitis, 2 ; stomatitis, 1 ; retro-pharyngeal abscess, 1 ; achyluria, 1 ; gastro-enteritis, 29 ; vomiting, 7 ; diarrhœa and dysentery, 3 ; abdominal colic, 12 ; constipation, 2 ; catarrhal jaundice, 6 ; acute appendicitis, 6 ; intussusception, 1 ; pneumococcal peritonitis, 1 ; *taenia* infections, 2.

Urinary.—Acute nephritis, 3 ; renal tumour, 1 ; renal calculus, 1 ; hæmaturia, 2 ; bacilluria, 2.

Congenital defect.—Hydrocephalus, 2 ; microcephalus, 1 ; oxycephalus, 1 ; spina bifida, 1 ; mongolism, 2 ; congenital heart disease, 4 ; congenital atresia of œsophagus, 2 ; congenital hypotropic pyloric stenosis, 2.

Nervous system.—Cerebral hæmorrhage, 3 ; cerebral tumour, 1 ; convulsions, 17 ; diplegia, 1 ; encephalitis, 4.

Meningitis, cerebro-spinal, 3 ; pneumococcal, 1 ; unknown organism, 4. Acute infantile paralysis, 5 ; sequelæ to, 2. Peripheral neuritis (post-diphtheritic), 1.

Injuries.—Concussion, 1 ; hæmothorax, 1.

Poisons.—Carbolic acid, 1 ; paraffin, 1.

Unclassified.—Fragilitas ossium, 1 ; cleido-cranial dysostosis, 1 ; Frolich's syndrome, 1 ; no diagnosis, 1.

STATISTICAL REPORT

OF

THE OPHTHALMIC DEPARTMENT, 1921.

By P. G. DOYNE, M.B., B.Ch.Oxon., F.R.C.S.Eng.

During the year 1921 there were 3574 new out-patients, 1176 being male and 2398 female.

The total number of attendances of old and new patients was 10,393, 4210 being male and 6183 female. There were also 1375 new casualty patients, the total number of attendances of casualty patients being 3303. 279 patients were admitted to the ward, 133 being male and 146 female.

210 operations were performed on in-patients.

General Statement of In-patients.

Number of beds in ward	25
,, of patients in ward on Jan. 1st, 1921	20
,, ,, ,, Dec. 31st, 1921	18

Average number of patients resident daily, 18·36.

Analysis of In-Patients—

Male	131 discharged.
Female	149 ,,

There were no deaths.

Table of In-patients.

Eyelids.	
Blepharitis	1
Entropion	1
Trichiasis	1
Cellulitis	3
Wound	2
Dermoid	2
Nævus	1
Endothelioma	1
Melanotic sarcoma	1
Rodent ulcer	1
Lacrimal apparatus.	
Dacryo-cystitis	1
Mucocele	4
Epiphora	1
Orbit.	
Cellulitis	1
Tumour	1
Ocular muscles.	
Ptosis (congenital)	1
Convergent squint	5
Divergent squint	2
Globe.	
Rupture	1
Conjunctiva.	
Wound	1
Symblepharon	1
Conjunctivitis (acute)	2
,, (chronic)	2
Trachoma	9
Cornea.	
Wound	15
Adherent leucoma	1
Keratitis, hypopyon	5
,, interstitial	13
,, phlyctenular	7
,, ulcerative	2
Burn	3

Iris and ciliary body.	
Irido-cyclitis	2
Iritis	13
Results of iritis	4
Aniridia	2
Lens.	
Capsular membrane	7
Cataract, congenital	5
,, senile	29
Soft cataract	5
Congenital dislocation	2
Dislocation	1
Vitreous.	
Hæmorrhage into	1
Persistent hyaloid artery	1
Retina.	
Detachment	4
Retinitis	1
Thrombosis of retinal vein	1
Choroid.	
Choroiditis	3
Sclera.	
Scleritis	2
Optic nerve.	
Optic atrophy	3
Glaucoma.	
Primary, congestive	5
,, non-congestive	5
Various.	
Blind painful eye	5
Exophthalmos	1
Facial paralysis	1

Table of Operations performed.

Eyelids.	
For ectropion	5
,, entropion	2
,, removal of growth from lid	6
,, abscess of lid	2
,, electrolysis of lashes	2
,, ptosis	1

Lacrimal apparatus.	
Probing lacrimal passages	3
Excision of lacrimal sac	6
Insertion of style	2
Ocular muscles.	
Tenotomy with advancement	6

Globe.		*Iris.*	
Excision	13	Division of anterior synechia	2
Evisceration	3	Iridectomy	19
		Iridotomy	4
Conjunctiva.		*Lens.*	
Conjunctival flap	3	Curette evacuation	2
Expression of lids	6	Discission of capsular membrane	26
Peritomy	3	Extraction of lens	27
		Needling soft cataract	16
Cornea.		*Sclerotic.*	
Sæmisch's section	3	Trephining	14
Paracentesis of anterior chamber	3		

Table of Anæsthetics.

Chloroform	5
Chloroform and ether	70
Ether	3
Cocaine	91
Novocaine and adrenalin	41
	210

LARGE SOLITARY FOCI OF CHOROIDITIS.

A Review of Cases admitted to the Ward between the years 1901–1921.

It is usually held that large solitary foci of choroiditis are of a tuberculous nature. The cases under review are those of this condition which have been admitted to the Ophthalmic Ward during the last 20 years. They are 16 in number. Of these 16 cases, 7 were males and 9 females. The average age of onset was 26·8 years. In 8 cases the R.E. was affected and in 8 cases the L.E. In 6 cases there was a strong family history of tubercle, and in 2 of these cases signs of tubercle were found in the patient. In 10 cases of the series there was evidence of sepsis elsewhere in the body. Of these 10 cases, in 5 there was pyorrhœa alveolaris, in 2 well-marked acne, in 1 furunculosis, and in 2 cases acne and pyorrhœa were associated. The Wassermann reaction was positive in 3 cases, but in each of these cases there were other possibilities in the way of tubercle or sepsis.

It would appear that skin sepsis and pyorrhœa may be a cause of this form of choroiditis, the choroiditis being of a metastatic nature. The choroiditis usually runs its course and quietens down, leaving a scar at its site. It is difficult to say whether treatment hastens its progress towards cure, but in one case, where acne appeared to be the primary cause, the administration of an autogenous vaccine derived from the acne pustules appeared to accelerate the healing process.

The situation of the inflammatory patch in every case was in the neighbourhood of the optic disc, usually not further away than a distance of 2 papilla diameters.

The commonest situation was either above or below the disc in the triangle between the temporal and nasal vessels, but it could not be said that this situation was in any way the rule. The nasal side of the disc and the immediate neighbourhood of the macula were often affected.

Cases of Hard Cataract.

During the year 29 cases of hard cataract were admitted, 11 male and 18 female, and 27 cataractous lenses were removed.

In 18 cases the extraction was combined with an iridectomy, and in 7 cases the lens capsule, having been opened by the Graefe knife between the puncture and counter-puncture, the lens was expressed and then a small peripheral iridectomy was performed. In 1 case a preliminary iridectomy had been performed 2 years previously.

Of the 24 cases in which the visual result is noted, 3 got $\frac{6}{9}$ V.; 7 got $\frac{6}{12}$ V.; 4 got $\frac{6}{18}$ V.; 3 got $\frac{6}{24}$ V.; 4 got $\frac{6}{36}$ V.; and 3 got less than $\frac{6}{60}$ V.

It should be noted that many of the cases are awaiting admission for needling.

Of the 3 cases in which the visual result was less than $\frac{6}{60}$, 1 vomited profusely shortly after the operation and on the second day developed a temperature and pains in the joints. No damage resulted to the eye, however, and the poor vision is due to a thick capsular membrane which it is intended to needle. In the second case there was an escape of vitreous; the eye eventually healed, and on discharge the vision was $\frac{5}{60}$. In the third case there is a thick capsular membrane which is to be needled.

Cases of Soft Cataract.

5 cases of congenital cataract, 2 female and 3 male, and 5 cases of soft cataract, 3 female and 2 male, were admitted to the ward.

Operations were performed upon 12 eyes, and consisted in 16 needlings, 2 curette evacuations, 1 extraction with iridectomy and 1 division of capsular membrane with iris scissors.

The results in all cases were satisfactory.

Cases of Glaucoma.

During the year 10 cases of primary glaucoma were admitted to the ward. Of these 5 were acute and 5 were chronic cases. Of the acute cases 4 were females and 1 male, and of the chronic cases 3 were females and 2 males.

In 1 acute case and in 2 chronic cases both eyes were affected.

3 of the acute cases were treated by trephining and 1 case by paracentesis followed by iridectomy.

In 1 acute case, in which the eye had been blind for years, paracentesis alone was performed. This procedure caused reduction in the tension of the eye and abolished the pain.

Of the chronic cases 4 cases were treated by trephining. In 2 of these cases, where the condition was bilateral, both eyes were trephined. 1 case was treated with miotics alone without recourse to operation.

Case of Tumour of Orbit.

Charles E—, *æt.* 65, was admitted to the ward on January 13th, 1921. To the outer side of the right orbit there was a large, soft mass, which projects from under the bony margin of the orbit. Fluctuation was obtained over the lump. The skin was not adherent. The tumour appeared to have a deep attachment to the upper wall of the orbit. There was no associated glandular enlargement nor any evidence of sinus involvement. There was some slight restriction in upward movement of the right globe.

The tumour had been noticed for about two months and it had been steadily increasing in size. The patient was very thin and had a distinctly yellow tinge to his skin, though no actual jaundice. He said that he had always been of this complexion, and had lived for many years in the West Indies. He thought that he had lost a little flesh lately. He stated that he had an abscess on his left knee 9 months ago.

General examination revealed nothing with the exception that the scar of an ulcer was seen on the left leg, which was characteristically gummatous.

The Wassermann reaction proved to be strongly positive.

The patient was ordered 10 grains of potassium iodide three times a day. This was subsequently increased to 25 grains three times a day. Under the influence of the iodide the tumour rapidly decreased in size, and full upward movement of the right globe was restored.

Case of Aniridia with Increased Tension.

H. H—, a small female child, *æt.* 1 *month*, was brought to the hospital because it was thought that the eyes were abnormal.

There was a considerable haze of both corneæ, but to a greater extent in the left cornea. On examining the right eye with a loupe, rudiments of the iris and of the ciliary body could be seen and the fibres of the suspensory ligament made out. Owing to the corneal haze it was not possible to see details in the left eye. No fundus details could be seen in either eye. The tension of the right eye was considerably raised, that of the left normal. This infant was the 12th of the family; there had been no miscarriages. The child appeared healthy in every other respect, but the facies were suggestive of syphilis.

The child was admitted to the ward on the 15th of April. A paracentesis was performed upon the anterior chamber of the right eye, and almost immediately the cornea cleared considerably, and a good red reflex was obtained.

On April 22nd, the right eye was trephined. The infant was readmitted on May 20th—it was here noted that the right cornea was much clearer. The left eye was trephined. On discharge the left cornea had cleared considerably as compared to its condition prior to operation.

On June 1st the tension of the right eye was again up. The right eye was trephined a second time and a portion of the rudimentary iris excised, a complete coloboma being formed.

On July 1st it appeared that the trephine opening had become sealed up; it was opened up by means of a Graefe knife. On July 6th the tension of the right eye is recorded as being low normal.

During the next few weeks the child attended Out-Patients twice a week and the eyes were freely massaged. The condition appeared to remain stationary. The child has some sight. Nystagmus was noted during this period, and two attacks of conjunctivitis occurred in each eye, which speedily responded to 5 per cent. protargol drops.

When last seen the left cornea had become rather more hazy as compared to its condition in July. The right cornea was slightly hazy. The tension of both eyes was normal. There was no sign of any stretching of the coats of the eye in any situation. The infant certainly has some sight. There are constant fine lateral nystagmoid movements.

REPORT

OF THE

DERMATOLOGICAL DEPARTMENT.

By S. E. DORE, M.A., M.D.Cantab., F.R.C.P.

Statistical Table, 1921.

DISEASE.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Acne indurata	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..	1	..	..	..	4
,, pustulosa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
,, urticata	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
,, vulgaris	4	2	1	..	..	2	1	3	1	1	1	..	2	3	..	2	..	2	1	1	1	3	2	1	34
Alopecia	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	3	..	1	..	1	..	1	..	..	8
,, areata	3	6	2	..	..	6	3	3	2	1	4	1	4	1	7	3	2	4	2	2	3	2	3	1	65
,, cicatrisata	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	5
,, post-febrilis	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
,, seborrhœica	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	..	..	4
,, totalis	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Angio-neurotic œdema	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Burns	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Carbuncle	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
Cheiro-pompholyx	..	..	..	..	..	..	..	2	1	1	..	3	3	1	..	..	..	..	..	..	..	..	..	..	11
Clavus	..	..	1	..	..	..	..	1	..	1	..	..	..	3	1	1	..	..	..	..	..	1	..	..	9
Comedones (multiple)	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Cutaneous horn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Dermatitis	1	..	2	..	..	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
,, bullosa	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
,, herpetiformis	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
,, medicamentosa	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
,, occupational	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	1	4	2	1	..	..	12
,, septic	..	..	..	..	2	..	3	..	..	..	..	..	..	..	1	..	1	2	1	..	..	1	1	..	12
,, sulphur	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	5
,, venenata	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
Dystrophy of nails	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	1	1	..	..	..	..	4
Ecthyma	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	2
Eczema	9	12	7	3	8	3	8	8	6	11	4	14	7	8	13	14	7	17	10	17	10	14	8	4	222
,, dysidrotic	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	1	..	..	..	..	7
,, impetiginised	..	..	..	..	..	..	2	2	2	3	..	..	2	..	1	1	1	..	..	..	..	..	1	1	16

Eczema, intertriginous	1					1									1	1	1								5
,, pruriginous									1																1
,, pustulosa	1		1														1								3
,, septic									2	2	1	1													6
,, solare						1	1		1					1											4
,, sweat																	1								1
,, traumatic		1																							1
Epithelioma																	1								1
Erysipelas		1																							1
Erythema (simple)	1	1					2		1	1						1			1	1		2		1	12
,, iris							1																		1
,, multiforme							1						2	1		1		1				2	1		9
,, nodosum		1																				1		1	3
,, pernio							2			1															3
,, purpuric							1																		1
,, toxic										1	1														2
Folliculitis	1	2	1	1			1		2					1	1	1		1		1	1				14
Furunculosis		1	3	2	1									1	3	2	2	3	5	3			2		28
Glossitis																							1		1
Granuloma annulare								1												1					2
Herpes febrilis	1													1					1		2			1	6
,, zoster	2				1							1	1	1		1						1	1		9
Ichthyosis															1										1
Impetigo contagiosa	5	5	1	1	8	1	4	4	4	5	4	4	4	5	10	7		7	6	7	10	4	1	4	115
,, bullosa										1							4				1				2
Insect bites											1														1
Keratodermia		1									1														2
Keratosis pilaris																					1				1
Kerion																1									1
Leucodermia								1																	1
Lichen planus		5						2	1	1				2		3			1	2	1				20
,, hypertrophicus															1										1
,, spinulosus														1											1
Lichenification		2	1		1									2		1		1	1						9
Lupus erythematosus					1	1			1	1			1	1				1			1	1			9
,, vulgaris	2		2	1	2	2				6	1		2	1	1	1	4	2	2			4			33
Milium												1													1
Molluscum contagiosum																								1	1

Statistical Table, 1921—*continued.*

DISEASE.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Molluscum fibrosum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Morphœa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Nævus (linear)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
,, (pigmented mole)	..	..	..	2	..	..	..	2	1	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	8
,, vascularis	2	13	8	7	1	11	6	7	6	9	3	10	5	8	7	12	3	6	1	7	1	6	1	1	141
Onychogryphosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Parapsoriasis	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Pediculi capitis	1	3	1	..	2	1	..	..	2	1	..	..	..	2	1	5	1	2	..	..	..	..	1	1	22
,, vestimentorum	..	1	..	..	..	1	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	5
Pemphigus neonatorum	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Pityriasis rosea	..	..	..	..	1	1	..	..	..	..	..	1	..	..	1	..	..	..	1	1	..	..	..	..	6
,, rubra	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Prurigo	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	3
Pruritus	..	1	1	..	1	..	..	..	1	..	..	2	..	1	1	1	..	..	..	..	..	..	..	..	9
,, senile	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	3
Psoriasis	4	5	..	2	..	1	2	3	2	5	..	4	3	5	3	4	1	1	2	4	3	7	1	..	62
Purpura	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Pyodermia	..	1	..	..	..	1	..	1	1	1	3	..	..	1	..	..	..	..	..	..	..	..	..	..	9
Rhinophyma	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Rodent ulcer	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	1	..	..	..	1	..	..	..	..	5
Rosacea	..	..	..	2	..	2	..	6	..	3	..	1	..	..	1	..	..	..	..	1	..	2	1	..	19
Scabies	4	3	11	6	6	1	7	2	4	7	3	7	1	2	1	2	5	3	1	3	4	2	2	4	91
Sclerodermia	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	2
Sebaceous cyst	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	..	..	3
Seborrhœa	..	..	..	1	1	..	..	1	1	1	1	1	..	..	..	..	..	1	2	4	3	2	2	3	22
,, eczematous	4	8	5	3	4	2	2	3	5	6	2	1	1	1	7	3	4	5	6	8	4	9	7	4	104
,, impetiginised	..	1	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Sycosis	..	..	1	..	..	..	..	..	1	..	..	..	..	..	2	..	1	..	1	..	..	..	2	..	.. 8
Syphilis (early)	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	4
,, (late)	..	2	..	..	..	..	..	..	..	..	1	..	..	..	1	2	..	..	..	..	..	..	1	..	7

Tinea barbæ	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
,, circinata	..	1	3	3	2	2	1	2	2	1	1	2	1	1	1	..	..	2	2	2	1	..	..	..	30
,, tonsurans	6	9	3	6	1	5	7	6	5	3	5	8	3	8	9	3	4	5	5	3	3	6	1	1	115
,, versicolor	..	..	1	..	..	..	..	..	1	..	..	1	..	..	1	..	1	..	1	..	..	..	1	..	7
Tuberculosis verrucosa cutis	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	5
Tuberculous ulcer	..	..	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Ulcer (traumatic)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	..	..	4
Urticaria	4	1	..	1	3	1	1	2	1	2	2	1	1	3	2	5	1	7	..	4	1	6	3	..	52
,, papulosa	2	3	2	1	2	..	..	1	..	1	2	..	7	3	3	3	3	1	4	1	3	..	1	1	44
Varicella	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	3
Varicose eczema	..	..	2	3	..	6	..	1	1	2	1	2	..	3	2	4	1	3	..	2	..	..	1	..	34
,, ulcer	..	4	..	..	2	1	..	2	1	2	..	1	..	2	..	4	..	6	..	5	..	3	1	3	37
Verruca	2	1	1	..	..	..	1	..	..	2	2	1	..	4	2	2	1	..	..	2	..	3	..	1	25
Xanthoma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Miscellaneous (including many cases of which the diagnosis is not recorded)	5	3	2	17	5	8	2	4	..	3	4	4	..	5	7	2	5	2	3	..	..	1	2	3	87
Total number of cases in each month	175		133		125		139		161		127		146		202		152		163		149		88		
Total number of cases during year																									1760

REPORT

OF THE

EAR DEPARTMENT

FOR THE YEAR 1921.

By H. J. MARRIAGE, M.B., B.S.Lond., F.R.C.S.Eng.

This report is drawn up on lines similar to those followed in 1914, and the statistical tables include only out-patients seen in the Ear Department, and not in-patients or patients referred from other departments.

The statistics of operations performed on patients admitted from the Department will be found in the General Surgical Report under the headings, "Diseases of the Auditory System," "Diseases of the Respiratory System," and "Diseases of the Digestive System."

New Cases treated during the year 1921.

Disease.	Males.	Females.	Total.
Diseases of the external ear	121	83	204
,, ,, middle ear	427	524	951
,, ,, internal ear	33	40	73
,, ,, nose, mouth and pharynx .	79	68	147
Miscellaneous	18	35	53
Total	678	750	1428

Disease.	Males.	Females.	Total.
A. DISEASES OF THE EXTERNAL EAR.			
Eczema of auricle	9	3	12
Impetigo of auricle	1	1	2
Contusion of auricle	1	—	1
Eczema of external meatus	4	4	8
Traumatic atresia of external meatus	1	—	1
Abrasion of external meatus	1	1	2
Exostosis of external meatus	1	—	1
Acute otitis externa	30	25	55
Furuncle of external meatus	8	8	16
Foreign body in external meatus	1	—	1
Cerumen	64	41	105
Total	121	83	204
B. DISEASES OF THE MIDDLE EAR.			
Otitis media :			
Acute suppurative	82	75	157
Chronic ,,	163	177	340
,, ,, with polyp	12	20	32
Acute non-suppurative	4	4	8
Chronic ,,	53	100	153
Acute mastoid disease following acute otitis media suppurativa	5	16	21
Acute mastoid disease following chronic otitis media suppurativa	—	4	4
Old mastoid disease	9	16	25
Otosclerosis	2	4	6
Sclerosis following chronic otitis media suppurativa	11	22	33
Carcinoma of middle ear	—	1	1
Eustachian obstruction :			
Tonsils and adenoids	67	69	136
Other causes	19	16	35
Total	427	524	951
C. DISEASES OF THE INTERNAL EAR.			
Deaf-mutism	3	2	5
Ménière's symptoms	2	1	3
Nerve-deafness	27	33	60
Congenital syphilis	1	4	5
Total	33	40	73

Disease.	Males.	Females.	Total.
D. DISEASES OF THE NOSE, MOUTH, AND PHARYNX.			
Hypertrophic rhinitis	4	6	10
Atrophic rhinitis	2	5	7
Acute rhinitis	4	1	5
Chronic rhinitis	6	14	20
Deflected septum nasi	40	23	63
Empyema of antrum Highmori	2	5	7
Chronic ethmoiditis	—	2	2
Nasal polypi	4	4	8
Epistaxis	4	3	7
Injury to nose	3	—	3
Carcinoma of nasopharynx	1	—	1
Carcinoma of alveolar process	1	—	1
Abscess of palate	1	—	1
Acute tonsillitis	3	2	5
Chronic pharyngitis	4	3	7
Total	79	68	147
E. MISCELLANEOUS DISEASES.			
Gland over mastoid	2	3	5
Wound of face	—	1	1
Wound of eyebrow	1	—	1
Cellulitis of face	—	1	1
Cellulitis of neck	—	2	2
Neuralgia	—	4	4
Bell's palsy	1	2	3
Asthma	1	—	1
Hay fever	—	1	1
Paralysis of vocal cord	—	1	1
Medical	7	16	23
Nihilitis	6	4	10
Total	18	35	53

REPORT FOR 1921

FROM THE

CLINICAL AND PATHOLOGICAL LABORATORIES.

By L. S. DUDGEON, C.M.G., C.B.E., F.R.C.P.

The total number of cases investigated in the Clinical Laboratory for 1921 was 4158, and in the Pathological Laboratory 110.

522 tumours were examined, of which 151 were carcinomata, 9 sarcomata, 3 rodent ulcers, and 13 endotheliomata, while the remainder, 346, were non-malignant.

502 bacteriological investigations were made, of which 96 were blood cultures, 334 bacteriological examinations of fæces, etc., were made, and also a large number of similar specimens were examined for helminths and protozoa.

1903 blood examinations were made, which included from the routine blood-count to elaborate investigations. The Wassermann reactions were investigated on a very large number of cases. Patients' blood was tested for evidence of typhoid, paratyphoid, dysentery and *coli* infections.

Throat cultures were examined for diphtheria bacilli from 621 cases, of which 83 were positive.

Sputum : This was examined from 176 cases. Tubercle bacilli were found on 53 occasions. Full bacteriological investigations were made in a very large number of instances.

215 bacteriological investigations of the urine were made. A large number of out-patients attended weekly for vaccine and other special treatment, and many ward patients were similarly dealt with.

REPORT

OF THE

X RAY DEPARTMENT, 1921.

Superintendent—Sir ARCHIBALD REID, K.B.E., C.M.G.

It was decided late in 1920 to appoint a qualified medical man with experience of X-ray work as a whole-time worker. The post was advertised and Dr. Fildes was appointed. He commenced his duties in the Department on January 1st, 1921.

Some minor changes were instituted in the Department, and as time went on a more satisfactory system of registering the patients was put in force.

A notable change was made to the use of double duplitised films instead of plates, and it has been found that, from every point of view, the film is far more satisfactory than the plate. The speed factor is increased, and the facts that films are not fragile and take up less room in storage are both greatly in its favour.

From time to time small additions were made to increase the efficiency of the apparatus, all of which was old, and it was found that the quantity of work running through the Department increased considerably.

In 1915 the number of examinations carried out was 6718, and in 1921 that number was increased to 9562. The number of treatments given was, in 1921, 3988, bringing up the grand total to 13,550.

REPORT

OF THE

PHYSICO-THERAPEUTIC DEPARTMENT (SECTION A), 1921.

By RICHARD TIMBERG, M.R.C.S.Eng., L.R.C.P.Lond., G.D.Stockholm.

During the years that have passed since the last report was issued in 1915, considerable changes have taken place in connection with the work of this Department.

Thus, its very designation has been altered, the old name of "Physical Exercise and Massage Department" having been substituted by the title of "Physico-Therapeutic Department." This more comprehensive term has been adopted in order to indicate the inclusion of all the various forms of physical treatment in one united whole. A closer connection between the Electro-Therapeutic and the Massage and Exercise Departments had for a long time been felt desirable; and in 1916 more definite co-operation between them was provided for by the formation of one department under the new inclusive name.

The work is more or less clearly divided into three different sections, each under its own medical officer. Thus, Section A represents the old Exercise Department; B the Massage Treatment, especially in connection with recent injuries; and C the Electro-Therapeutic work.

The present part of the report refers merely to Section A. It therefore follows at once that the number of patients dealt with is considerably smaller than was the case during the last few years, when all the physical exercise and massage patients were entered in one table. The total number of patients during 1921 reached therefore only 926, versus 1394 in 1914, and the somewhat alarming total of 1748 in 1915, when the number was swelled by the wounded soldiers. On the other hand, the present division of the work has had the effect of bringing the more chronic type of cases into Section A, so that the number of treatments given there to the individual cases has been very considerable, the total attendances being 22,014, in addition to 6492 electric heat baths, making a grand total of 28.506 treatments. Another circumstance has been the relatively great number of patients in this section that have been attended as in-patients of the hospital—a fact which generally makes a greater demand upon the time of both the operators and the medical officer.

Another new feature that has been introduced during these years is the appointment of a special lady almoner in connection with the Physico-Therapeutic Department. This has now become such a recognised institution, already of several years' standing, that one is apt to forget that it is an innovation since the last report was issued. Still, this gives the first opportunity of recording the fact in one of these reports, and of acknowledging the great advantage which it has proved in the organisation of the work. The patients' circumstances are now investigated on the spot, their attendance recorded, absentees reminded and periodical examinations by the medical officer arranged—all factors which contribute in no small degree to the smooth and efficient running of the department.

The Massage School has, in the course of years, become still more firmly established. The number of students which rapidly increased all through the war has latterly shown some natural tendency to assume more manageable limits; and the cooperation of all the various forms of physico-therapeutics has proved a great benefit, not least from the point of view of the training of the students and in their preparation for their various examinations. It is a pleasure to record that the students from St. Thomas's Massage School generally figure in a favourable way in the examination lists of what is now termed the "Chartered Society of Massage and Medical Gymnastics."

The great number and variety of cases with which the students come in contact is no doubt a very important help to them, both for their examinations and their future work, although at the same time it is apt to demand so much physical exertion on their part that it makes it difficult for them to find the time and energy for their theoretical studies, and it is necessary that a certain number of paid assistants should be employed, these being invariably recruited from our own old students who have distinguished themselves by special efficiency.

In spite of numerous approaches both from the side of prospective candidates and from the examining body, no provision has been made for the training of men students, and it is one of the fortunate legacies from the war that lady operators can be employed to a much greater extent than formerly in treating male cases. In cases where this is not expedient the treatment is provided by the same two men attendants who have now for many years efficiently carried on this work, except for the temporary absence of one of them for a few years on war service. One of the minor troubles during those years was the frequent changes of porters in the Department, as one after the other was called up, whereas we now for many years have had the advantage of a continuity in this respect.

Last, but not least, it should be mentioned that the Department in all its sections still has the benefit of the enthusiastic and indefatigable superintendence of Miss Randell, who has contributed so much to its organisation and progress.

Table of Cases treated in the Physico-Therapeutic Department (Section A), during 1921.

Diagnosis.	M.	F.	Total.	M.	F.	Total.
Deformities—						
Spinal curvatures (various types) :	42	106	148			
Caries of spine	2	1	3			
Spondylitis	4	1	5			
Torticollis	—	3	3			
Cervical rib	1	5	6			
Dupuytren's contracture	2	6	8			
Schlatter's disease	—	1	1			
Genu valgum	3	4	7			
Talipes—						
Planus	20	14	34			
Cavus	1	2	3			
Equino-varus	6	4	10			
Varus	1	1	2			
Valgus	1	2	3			
Hallux valgus	1	2	3			
Hammer toe	1	—	1			
Bunions (after operation)	—	1	1			
Foot trouble without definite deformity	3	18	21			
				88	171	259

Diagnosis.	M.	F.	Total.	M.	F.	Total.
Brought forward				88	171	259
Injuries—						
Contusions	17	7	24			
Old gunshot wounds	4	—	4			
Fractures (old)	8	3	11			
Cut tendons	4	5	9			
Ruptured tendo Achillis	1	—	1			
Joint injuries—						
Shoulder	15	11	26			
Elbow	3	4	7			
Hand and wrist	21	14	35			
Sacro-iliac	2	2	4			
Knee	22	8	30			
Ankle	20	10	30			
				117	64	181
Chronic synovitis				14	7	21
Teno-synovitis				2	2	4
Ganglion				—	4	4
Osteomyelitis				4	—	4
Cicatricial contractions				2	6	8
Do. after cellulitis				19	18	37
Do. after burns				2	2	4
Arthritis—						
Tuberculous	3	12	15			
Osteo-	32	35	67			
Rheumatoid	26	18	44			
Gouty	3	1	4			
				64	66	130
Lumbago				10	3	13
Fibrositis				13	17	30
Diseases of nervous system—						
Cerebral tumour				5	—	5
Hemiplegia				4	12	16
Spastic paralysis				3	2	5
Bulbar lesion				—	1	1
Meningitis				1	1	2
Encephalitis lethargica				3	3	6
Anterior poliomyelitis				15	20	35
Progressive muscular atrophy				5	—	5
Disseminated sclerosis				1	9	10
Hæmatomyelia				—	1	1
Erb's paralysis				2	1	3
Crutch palsy				2	2	4
Post-diphtheritic paralysis				1	—	1
Post-anæsthetic paralysis				—	1	1
Tabes				1	—	1
Sciatica				22	12	34
Other peripheral neuritis				7	8	15
Paralysis agitans				—	2	2
Neurasthenia				2	2	4
Functional				3	2	5
Myotonic atrophy				—	1	1
Diseases of cardio-vascular system—						
Valvular disease				2	—	2
Aneurism				1	—	1
Thrombosis				2	6	8
Carried forward				417	446	863

Diagnosis.	M.	F.	Total.	M.	F.	Total.
Brought forward				417	446	863
Digestive and constitutional diseases—						
Constipation				2	6	8
Visceroptosis				—	2	2
Abdominal adhesions				1	4	5
Tuberculous peritonitis				1	—	1
Abdominal pain				1	2	3
Frölich's obesity				—	1	1
Rickets				1	1	2
Debility				8	2	10
Miscellaneous				10	15	25
Mercurial inunctions				6	—	6
Totals				447	479	926

REPORT

OF THE

PHYSICO-THERAPEUTIC DEPARTMENT (SECTION B), 1921.

By JAMES MENNELL, M.A., M.D., B.C.Cantab.

In presenting the first report of this section of the Physical Treatment Department, I should like to associate myself with many of the remarks in Mr. Timberg's report of his section. A very great advance has been made by co-ordinating the activities of the three sections of the Department, though it is chiefly owing to Miss Randell's most skilful organisation that the co-ordination has been rendered possible. It is due also to her, and to those of her staff whom she has been able to inspire with her great teaching abilities, that the work of the Massage School has been rewarded by an unusual measure of success. This is, perhaps, the more striking when we consider that no attempt whatever is made to "cram" the students for the examinations. Miss Randell arranges that I should lecture to the students twice a week, and it is only a comparatively small portion of these lectures that can serve any useful service from the examination point of view, as they are devoted in the main to trying to help them in the management and treatment of patients in later life. In these lectures an attempt is made to familiarise the students with the medical and surgical aspects of their work, and psychology receives its due attention. When allowance is made for the amount of time that is spent in trying to turn out a really competent masseuse, and for the quite unusually large amount of practical work which each student is called upon to perform, it is a matter of heartiest congratulation to Miss Randell and her staff that the examination results have been so very favourable during recent years.

The value of the special branch of the lady almoner's department attached to the Department has been very great indeed; and it has rendered a large amount of work possible, which, without it, could only have been very meagrely performed.

The growth of this section of the Department dates from the beginning of the war. In August, 1914, when I offered to help in the hospital in any capacity, it was thought by the authorities that my best place would be in the Electrical Department, which was without a medical officer while Mr. Bristow was on active service. I therefore took over his work in the Electrical Department; but very soon certain of the more difficult fracture cases from Casualty were sent down to me there for treatment. By 1915 the number was increased to such an extent that it was quite impossible for me to cope with them in the Department, and I therefore gained permission to transfer them to what was then known as the Physical Exercise Department. Here I continued to take charge of an ever-growing civilian clinic, to which were added in due course most of the fracture cases amongst the soldiers which were recommended to the Department, as soon as the hospital began to admit them. This continued till March, 1916, when Sir Robert Jones asked me to start and take charge of the Massage Department at the Military Orthopœdic Hospital at Shepherd's Bush. It was found impracticable for the whole of the work at St. Thomas's to be carried out by one medical officer; and, before many months had elapsed, the work of the Department was again divided, and I returned to take charge of this section again.

Almost immediately the work of this section became very greatly enlarged, as the general order was issued by the Resident, Mr. Roquette, that all fractures, sprains and dislocations arriving in Casualty, and which were not admitted to the wards, were to be referred forthwith to the Department. This arrangement remained unaltered until the summer of 1921, when a Senior Casualty Officer was appointed to take charge of the fracture cases in Casualty, though the work of the Department did not alter very much, as a vast majority of patients still continued to arrive. This continued up to the end of the year. Thus it comes about that the great majority of cases attending in this section were due to fracture, dislocation or other injury.

It was about this time that a regular pre- and post-natal clinic was started, though for some time previously tentative attempts had been made to prove the value or otherwise of the treatment. Part of the routine of the Department now is work in Mary Ward; where, in all suitable cases, the mothers after confinement are taught definite exercises to restore the strength of the abdominal wall, in the hope that the amount of subsequent trouble from visceroptosis may be reduced. Moreover, all patients with depressed nipples, or who have failed to nurse their babies on previous occasions, are provided with treatment, and it is pleasing to be able to know that the success attending this experiment has been very considerable. Amongst the statistics, it will be noted that only 21 cases of alactia are recorded as having been treated; but this refers entirely to patients who have been sent in from the Out-Patient Department, and have nothing to do with the work in connection with the Maternity Clinic, of which statistics are not available.

Although it does not strictly form any part of the report of the year 1921, I think it should be on record in connection with this Department that when the military wards were closed a Pensioners' Clinic was started, and soon assumed considerable dimensions. There is, however, only one particular point in connection with this Clinic to which attention need be drawn. St. Thomas's was opened as a centre for the fitting of artificial limbs, and I think it may be said with a considerable amount of truth that it was very largely owing to the incessant representations made from this Department that the value of the light limb was duly forced home on the Pensions Authorities, and also the value of training in the use of the limb in those cases where the patient was unable to use one by the light of nature. Naturally the efforts in this Department were not popular at the time, but the incessant representations ultimately bore fruit, and it is probable that a very large number of men who never even heard of the Department benefited indirectly by the work which was done there.

It was during the year 1921 that members of the Metropolitan

Police Force first began to attend the Department regularly for treatment, and in the statistics they are awarded separate place for the purpose of continuity. The total number who attended during the year was 57.

From the nature of the work comparatively few in-patient cases are treated when compared with those dealt with in Section A. They only amounted to 85. The majority of the work of the Department was derived from Casualty and Out-Patient Departments, there being 682 from the former and 547 from the latter, making a total of 1371 new cases treated during the year. In all, 31,234 attendances were recorded, and 2290 heat-baths were administered. Considering these as separate treatments, the total number of treatments during the year was 33,524.

The new cases may be grouped as follows. The only point which may be a little misleading is the large number of fractures of the radius which are recorded as distinct from Colles' fractures. It has often been difficult to know under which heading to place these patients, and it is possible that the separation of cases into the two groups has not been very definitely accurate. Fractures of the phalanges of hand and foot have all been grouped together, and at least three of the cases referred to as "fracture of scaphoid" refer to the navicular bone of the tarsus. Last, the number of cases referred to under the heading "out-patients" is also misleading. A very large percentage of these patients were sent to the Department direct from the Sorting-Room.

Diagnosis.	Police.	Wards.	Casualty.	Out-patients.	Grand total.
FRACTURES (total number 873):					
Acromion	—	—	1	1	2
Clavicle	—	2	52	9	63
Humerus	—	9	62	32	103
Radius	—	1	75	18	94
Ulna	—	—	19	5	24
Ulna and radius	—	3	78	17	98
Olecranon	—	—	5	6	11
Colles	1	5	98	36	140
Metacarpal	1	—	26	3	30
Scaphoid	—	—	6	4	10
Pisiform	—	1	1	1	3
Bennet's fracture	1	—	5	—	6
Phalanges	2	—	25	11	38
Ribs	—	—	—	1	1
Pelvis	—	—	1	—	1
Femur	—	10	1	24	35
Patella	1	5	1	12	19
Fibula	—	1	17	15	33
Tibia	1	5	23	19	48
Tibia and fibula	1	6	10	32	49
Pott's	1	1	4	16	22
External malleolus	—	1	3	3	7
Internal malleolus	—	—	1	2	3
Astragalus	—	—	—	1	1
Os calcis	1	—	6	5	12
Metatarsal	—	—	10	4	14
Internal derangement of knee	—	2	8	17	27
Dislocated elbow	—	—	19	5	24
Dislocated shoulder	4	—	28	21	53
Stubbed shoulder	—	—	1	2	3
Sacro-iliac strain	2	—	—	13	15
Other injuries to joints	22	4	82	64	172
Tb. hips, etc.	—	—	—	5	5
Congenital hip	—	—	—	6	6
Painful feet	2	—	5	20	27
Amputations	—	5	—	21	26
Osteo-arthritis	2	2	1	5	10
Septic arthritis (old)	—	1	—	3	4
Coccydinia	—	1	—	5	6
Old gunshot wounds	3	—	—	4	7
Torticollis	—	5	—	7	12
Cut tendons	2	—	1	4	7
Muscle injuries	3	—	2	8	13
Quadriceps insufficiency	1	—	—	2	3
Alactia	—	—	—	21	21
Miscellaneous	5	15	1	35	56
Totals	56	85	688	545	1374

REPORT

OF THE

PHYSICO-THERAPEUTIC DEPARTMENT (SECTION C), 1921.

By G. MURRAY LEVICK, M.R.C.S., L.R.C.P.

During 1921 the treatment of patients in the Electricity Department showed much progress, and several new methods were adopted as a result of experience gained during and since the Great War, and an increasing number and variety of cases were received from the various wards and out-patient departments.

In regard to the general organisation of the staff, it may be said that the incorporation of the Department with the Massage and Exercise Departments so as to form a complete school of physico-therapy under one sister has been attended with success.

In many cases efficient physical treatment demands a close co-operation between these three sections, and in this hospital the work has been blended with a smoothness that has led to very good results.

The cases coming under treatment may be divided broadly into " Surgical " and " Medical " classes.

Surgical Cases.

Of these, the orthopædic cases have formed a large majority, and, as planned by Sir Robert Jones, close touch has been maintained with the Department of Orthopædic Surgery in the treatment of the patients.

It may be said at once that the fundamental principle under-lying the electrical treatment of muscles, whether supplied by normal or abnormal nerves, has undergone little or no change since its inception at this hospital in the years immediately preceding the Great War by the medical officer in charge of the Department at that time, because the vast experience gained in the treatment of nerve injuries at the Military Orthopædic Hospitals at Shepherds Bush, Tooting, and several similar institutions where his teaching has been followed, has fully proved its soundness.

The fundamental principle is that when for any reason the normal activity of muscles is suspended either from paralysis due to lower neurone injury or to the fixation of the part for some surgical reason, their contractility should be maintained by periodical stimulation from the electric current suitable to their condition, care being taken to ensure that each individual muscle gets the correct dosage.

So thoroughly has the Department been equipped for carrying out this form of treatment that it is probably unrivalled by any public hospital in the country.

It is very essential that work of this nature should be carried out by operators adequately instructed in anatomy, working under proper "orthopædic" supervision.

In this respect, while again emphasising the advantage derived from the incorporation of the Department with the St. Thomas's School of Physio-therapy, it seems well to record the fact that because the school is formed entirely by women, certain treatments of an orthopædic nature occasionally needed by male patients cannot be carried out in an efficient manner.

At the present time, however, there appears to be no remedy for this difficulty, because while women of higher education and status are adopting this work as a profession, English men of similar attainments never adopt it, and for those men who do, there is no orthopædic school on a par with St. Thomas's where they can obtain efficient teaching.

Of the cases referred from the Orthopædic Department, infantile paralysis forms the majority.

When the affected muscles do not respond to faradic stimulation, contractions are obtained by means of the interrupted galvanic current, unless in the case of young children this form of treatment is found to be too painful. To meet this difficulty an arrangement of two microfarad condensers advocated by Dr. Turrell, of Oxford has been added recently to the Department, and the painless nature of the discharges from this apparatus has enabled its adoption whenever desired as a substitute for the interrupted galvanic current.

On the whole we prefer the galvanic current when this is possible, owing to the greater hyperæmia resulting from the more prolonged passage of the ionising current, which continues to flow for about half a second after the stimulus at each closure of the circuit.

This observation applies to currents broken by a metronome interrupter with mercury contacts such as we use.

Periodical treatment of this nature is carried on as long as any hope is entertained for the recovery of a useful innervation, but never after this has been abandoned, and it is of course necessary to consider each syndrome on its own merits, as no hard and fast rule is possible for determining when such hope should be relinquished.

As soon as regeneration of the lower neurone has proceeded so far as to yield a response to faradic stimulation in the affected muscles without undue pain, this current is invariably used for the rest of the treatment. This current is obtained from the Smart-Bristow coil, and is graduated by means of the moveable core.

The results of the treatment above described, given in an efficient manner, leave no doubt as to the importance of electrical treatment of anterior poliomyelitis. There are other electrical measures, directed to the improvement of the circulation, especially in winter, that might be added with advantage, but as the demand for treatment in the Department is so far in excess of its resources, it is only possible to adopt those measures that appear to be of first importance.

All surgical lesions of the lower neurone are treated on the lines above described, with the occasional exception of cases complicated by nerve irritation.

In the case of fractures, surging faradic treatment is given to the muscles of the part, the great advantage of this method lying in the fact that the muscles can be regularly exercised without disturbing the alignment of the fractured bones.

For example, recently a routine electrical treatment has been started for Colles' fracture. In these cases the inflammation and atrophy of the muscles arising from the lower end of the radius is the most important factor in the weakness and impairment of mobility at the wrist usually following this class of fracture.

Pronator quadratus especially suffers in this respect, and if left untreated for a few weeks following the fracture, may be the seat of a fibrosis resulting in a permanent limitation of movement that might well have been avoided had daily faradic stimulation been administered.

Much care is needed in the earlier stages of the treatment to ensure that the muscle is not over-stimulated.

We now regard the electrical stimulation of muscles in cases of fracture especially in the region of joints as being of great importance.

After abdominal operations, muscular atrophy and adhesions of the abdominal wall may be prevented by judicious faradism. This can be administered in a manner (recently shown in a public demonstration in the Department) which eliminates the danger of stretching the scar of the operation wound. So far only a few of these cases have been treated in the Department, as a result of experience gained elsewhere, but it seems not unlikely that this form of treatment will in time become generally recognised, so greatly is the convalescence shortened, while the annoying symptoms following even quite small adhesions in the abdominal wall are obviated.

Not infrequently indolent sinuses have been sent to the Electrical Department for treatment. Two of these have been tuberculous, arising from anal fistulæ. They had remained *in statu quo* for many months, and in each case a great improvement was effected by a few weeks' treatment, and the patients were sent to convalesce in the country with granulation proceeding rapidly from the bases of the sinus.

The method adopted was to introduce a zinc electrode, cut in a shape to fit the sinus, and by connecting this with the anode, the patient being made negative, to pass a galvanic current for five minutes at an amperage suitable to the area of the sinus walls. Treatments were given either daily or at longer intervals according to the extent of the reaction following the previous treatment.

Other sinuses coming for electrical treatment arose in connection with bony sequestra.

Experience goes to show that if a sinus is connected with a sequestrum, a somewhat "violent" reaction immediately follows the first treatment, accompanied by a discharge of pus. Should the sinus not terminate with a sequestrum, the reaction is of a less vigorous nature. Hence ionisation is of some diagnostic value in these cases. Some of them have done remarkably well, and so rapidly does granulation take place that great care must be exercised to secure resolution at the bottom before the sides are allowed to close together.

A large number of cases of traumatic synovitis of joints have come under electrical treatment, but as the methods adopted have been similar to those used for synovitis from other causes, they will be described later.

Probably the most important innovation to be introduced lately into the Department has been the electrical treatment of the various conditions usually classed as "flat-foot."

Quite recently electrical methods have shown up a *rôle* of the dorsal interosseous muscles of the foot that hitherto has been unpublished (*Brit. Med. Journ.*, March 12th, 1921), viz. their action in supporting the transverse metatarsal arch, and has emphasised the importance of the flexors of the toes in the support of the posterior longitudinal arch. As a result of these revelations a routine method of electrical treatment has been instituted at St. Thomas's on lines they have indicated.

The prognosis in the various forms and degrees of flat-foot coming under this treatment has been changed altogether for the better.

MEDICAL CASES.

Arthritic patients form the majority of applicants for electrical treatment, and unfortunately it is impossible to deal with all the cases coming under this heading. As many have been treated, however, as far as possible without crowding out other cases.

From a clinical point of view they are unsatisfactory owing to the rarity with which the exciting cause can be eliminated.

Most cases of which the origin is suspected to be oral sepsis continue to progress after the mouth has received thorough attention, and it appears as if intestinal toxins were almost always a prominent factor.

Nevertheless when sufficient time can be devoted to these patients much can be done for them in arresting the course of the complaint, and we have many elderly and old patients whose activities we prolong from year to year by occasional courses of electrical treatment.

This is directed to the improvement of nutrition in the affected joints by the passage through them of the continuous current, and of the stiffening muscles by surging faradism.

We may say here that as a result of a series of experiments we have absolutely abandoned any faith we ever had in the possibility of introducing drugs into the deep tissues by means of electricity.

The skin, mucous membrane or any raw surface can be treated very effectively by this method, but never the deeper tissues.

Diathermy has been used with much success in the treatment of chronic arthritis, and would be used to a greater extent were we not handicapped by the possession of only one apparatus. Gonorrhœal arthritis especially yields to this form of treatment.

Many cases of peripheral neuritis of various causation have been treated electrically. Painful types involving the afferent nerves have been found invariably to respond to suitable galvanic treatment. When motor nerves are affected, in addition to such treatment, the muscles supplied by the affected nerves are always treated by faradism. In some cases diathermy has given very much better results than the galvanic current, and we are inclined to think that they are the cases in which the conductivity of the tissues is such that currents of low voltage do not take the path of the exciting lesions, but in the majority of these cases there are three factors demanding treatment, viz. the alteration of irritability in the axons, the perineural inflammation and the trophic changes in the tissues supplied by the affected nerves.

The action of the faradic current on tissues in which it produces no visible response is at the present time receiving particular attention, and it is possible that in the future we may have to modify the views formerly held on this subject.

A good many cases of hemiplegia have been sent to the Electrical Department, and the form of treatment administered has been rather paradoxical. It was evolved during the treatment of some head injuries during the war, and is based on the observation that when, after an upper neurone lesion, the reflexes have been much increased and there is rigidity of the affected muscles, a very carefully applied faradic current gently " surged " through the reflex arc diminishes the reflex excitability and reduces the overtone of the muscles.

This treatment is very effective. In acute cases the tendency to cramp has been reduced or altogether abolished, while in ambulatory cases the gait has been greatly improved. If applied skilfully there is not the least danger of this treatment causing a recurrence of hæmorrhage; in fact it has probably a reverse effect, and we see no reason why it should not be applied at any time after the lesion has occurred, as there can be no question that a reduction of muscular tone must lead to a reduction of blood-pressure, and the effect of the treatment is immediate.

The above sketch of some of the more important work carried out in the Electrical Department is intended to present some idea of the increasing demand made upon it. During the year there were 16,360 attendances for treatment by 1909 patients.

REPORT

OF THE

ORTHOPÆDIC DEPARTMENT, 1921.

By W. ROWLEY BRISTOW, M.B., B.S.Lond., F.R.C.S.Eng.

The Orthopædic Department has grown largely during the past year, but has been hampered owing to the paucity of beds, and also by the fact that the beds allotted have of necessity been scattered through the various wards.

A statistical report of in-patients only is given, but we hope in future years to give a statistical report of out-patients in addition.

The work of the Department is closely correlated with that of the Physical Exercise and Massage Departments, where a clinic is held on Friday mornings in conjunction with the officer in charge of those departments.

The routine work of the Orthopædic Department consists of in-patient operations on Monday afternoons at 2 o'clock in the South Theatre; out-patients and out-patients' operations on Tuesday afternoons at 2 o'clock, and a ward visit at 9.45 on Friday mornings. In addition, there are fifty country beds at St. Nicholas' Hospital, Pyrford, which are reserved for the orthopædic patients of St. Thomas's, and are under the charge of the same staff. Mr. Perkins, the Orthopædic Registrar, visits the hospital on two days a week.

At Pyrford we treat a good proportion of the cases of surgical tubercle, particularly hip disease and Pott's disease. These children are treated on frames or plaster beds in the open air night and day, and every advantage is taken of sunlight and the modern therapeutic methods for the treatment of tuberculosis. By fully utilising the Pyrford beds we are able to get through a much greater amount of work in the Department, as the shortage of beds in the Central Hospital is thereby somewhat counterbalanced.

Statistical Report.

In-patients.

Deformities—	
Joints—Hip: Dislocated hip (congenital)	4
Coxa vara	1
Knee: Genu valgum	6
Ankle and tarsus: Congenital talipes	25
Pes planus	1
Pes cavus	3
Hammer toe	3
Hallux valgus	8
Bones—Incurved tibiæ	1
Short femur	1
Syndactilism	1
Muscles—Torticollis	5
Bones—	
Fractures	6
Irregular growth: Kohler's disease of scaphoid	1
Inflammation: Chronic osteo-myelitis	3
Joints—	
Hip—Trauma	1
Arthritis: Tubercular	11
Chronic	2
Knee—Trauma: Synovitis	1
Injured semilunar cartilage	1
Loose body in knee	1
Arthritis: Tubercular	2
Chronic	3
Ankle and tarsus: Trauma	3
Arthritis: Tubercular	1
Chronic	2
Polyarticular: Rheumatoid arthritis	2
Spine—Arthritis: Tubercular	5
Nervous System—Spastic paralysis	8
Anterior poliomyelitis	22
Peripheral nerve injury	1
Muscles and Tendons—Snapping hip	1
Skin and Fascia—Skin contracture	1
General Diseases—Rickets	7
Total	144

STATISTICAL REPORT

OF

THE TUBERCULOSIS DEPARTMENT, 1921.

By G. T. HEBERT, M.A., M.D., B.Ch.Oxon., M.R.C.P.

A. Out-Patient Department.

Tables 1 and 2 give the diagnosis of the cases attending for the first time in the year 1921. Table 2 deals with patients resident in the inner wards of Lambeth, the area for which the Tuberculosis Department serves as Borough Tuberculosis Dispensary, and also with patients referred for consultation or special examination from the other Tuberculosis Dispensary in Lambeth at 73, Effra Road, by arrangement with the Lambeth Borough Council. Table 1 deals with the remainder—patients resident in county boroughs or metropolitan boroughs other than Lambeth.

Table 1.

	Adults.		Children under 15.	Total.
	Male.	Female.		
Pulmonary tuberculosis	115	47	3	165
Non-pulmonary tuberculosis	29	24	42	95
Non-tuberculous	195	153	120	468
Diagnosis doubtful	9	11	13	33
Total	348	235	178	761

Table 2.

	Adults.		Children under 15.	Total.
	Male.	Female.		
Pulmonary tuberculosis	149	81	6	236
Non-pulmonary tuberculosis	17	12	32	61
Non-tuberculous	255	274	289	818
Diagnosis doubtful	16	14	22	52
Total	437	381	349	1167

Table 3 gives the sources of all of the new cases. It will be seen that 338 cases were sent from the other out-patient departments of the hospital for diagnosis and, if necessary, treatment. Private or panel practitioners, especially those in the neighbourhood, sent 269 of their patients directly to the Tuberculosis Department. The London County Council cases are those which had come to the notice of the Council, and were sent to the Tuberculosis Dispensary for supervision or for investigation as regards the need for institutional treatment.

Table 3.

	Adults.		Children under 15.	Total.
	Male.	Female.		
Out-patient departments	116	132	90	338
Private practitioners	127	123	19	269
London County Council	10	2	7	19
London War Pensions Committee	55	—	—	55
Consultation cases from				
(*a*) Effra Road Dispensary	194	168	183	545
(*b*) Battersea Dispensary	138	72	63	273
(*c*) Wandsworth Dispensary	64	63	44	171
Contact cases and other sources	75	89	94	258
Total	779	649	500	1928

Table 4.

Total attendances		8753
Old cases attending		599
Cases referred to other departments—		
(*a*) Old	117	
(*b*) New	1270	
		1387
Number of sputum examinations		521
Number of patients sent to—		
(*a*) Convalescent Homes		63
(*b*) Sanatorium		126
(*c*) Home for advanced cases		29
(*d*) Infirmary		71

B. IN-PATIENT DEPARTMENT.

80 patients admitted to Luke Ward in 1921—39 males and 41 males. Average stay 6 weeks.

28 males and 27 females were diagnosed definitely as tuberculous before admission and were admitted—

(1) As urgent cases.
(2) For hospital treatment preliminary to transference to Sanatorium.
(3) For treatment and detailed diagnosis.
(4) Transfers from General Wards, for disposal.

20 males and 15 females were transferred to sanatoria.

7 males and 1 female were transferred from General Wards.

3 males died—1 from spontaneous pneumothorax, 1 from tuberculous broncho-pneumonia (post-anæsthetic). 1 advanced case transferred from Medical Ward.

Remaining cases, 11 male and 14 female, were admitted for observation.

Males—Chronic pulmonary tuberculosis	1
Probable pulmonary tuberculosis	2
Hæmoptysis; no other evidence of pulmonary tuberculosis	3
New growth	1
Tuberculin test for ? tuberculous knee (negative)	1
No tuberculosis	3
Females—active hilum tuberculosis	1
Hilum tuberculosis and tuberculous wrist	1
Inactive pulmonary tuberculosis	1
Tuberculin test for tuberculous spine (positive)	1
New growth	1
Diaphragmatic hernia	1
Hæmoptysis and pregnancy, ? non-tuberculous	1
Cystitis, ? cause	1
Progressive muscular atrophy (sent up as tuberculous lesion of cauda equina)	1
Empyema, sent from a children's hospital as pulmonary tuberculosis	1
Non-tuberculous	4

REPORT

OF THE

VENEREAL DEPARTMENT, 1921.

By L. W. HARRISON, D.S.O., M.B., Ch.B.Glas.

This was the first complete year during which the Department, opened in 1917, was established in separate rooms. In contrast to previous years, also, it was open daily except on Sundays from 8 a.m. to 10 p.m., and on Sundays for intermediate treatment from 10 a.m. to noon.

The clinical work of the department is shown in the table on p. 160.

The turnover was an increase of 25·5 per cent. in new cases over 1920, while the figures of V.D. treatment centres in the whole country showed a decrease of 19·1 per cent., the decrease in London being 18·5 per cent.

The number of attendances was 113,341, an increase of 49·8 per cent., and the number of arsenobenzol injections 19,790.

The work of the laboratory was as follows :

Wassermann tests	5431
Complement-fixation for gonorrhœa . . .	1538
Cultures	2431
All the vaccines required for treatment.	

In addition 6749 microscopical specimens of secretion were examined in the clinical section, viz.—

For the gonococcus . .	6307
For *Sp. pallidum* . .	442

	Syphilis.		Soft chancre.		Gonorrhœa.		Conditions other than venereal.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of persons who on 1st Jan., 1921, were under treatment or observation . .	886	575	49	11	557	320	111	16	1603	922
2. Number dealt with during the year in the Out-Patient Clinic *for the first time* and found to be suffering from—										
Syphilis only . .	656	419	—	—	—	—	—	—	656	419
Soft chancre only .	—	—	40	3	—	—	—	—	40	3
Gonorrhœa only .	—	—	—	—	1123	292	—	—	1123	292
Syphilis and soft chancre	—	—	—	—	—	—	—	—	—	—
Syphilis and gonorrhœa .	51	59	—	—	51	59	—	—	102	118
Gonorrhœa and soft chancre	—	—	1	1	1	1	—	—	2	2
Syphilis, soft chancre and gonorrhœa . .	—	1	—	1	—	1	—	—	—	3
Conditions other than venereal	—	—	—	—	—	—	959	367	959	367
Total—Item 2 . .	707	479	41	5	1175	353	959	367	2882	1204
Total—Items 1 and 2	1593	1054	90	16	1732	673	1070	383	4485	2126

REPORT

OF THE

CARDIOGRAPHIC DEPARTMENT, 1921.

By M. A. CASSIDY, M.A., M.D.Cantab., F.R.C.P.

During the year 1921, 267 out-patients were treated in the Department; of these 189 were males and 78 females. 136 cases were diagnosed as mitral disease, and of these 21 were mitral regurgitation, 83 mitral stenosis, and 32 double mitral disease.

There were 98 cases of aortic disease; of these 89 had aortic regurgitation, 1 aortic stenosis, and 8 double aortic disease.

Out of the total of 267 cases, a history of acute or subacute rheumatism or chorea was obtained in 116 cases (43 per cent.), and out of a total of 98 cases of aortic disease a history of rheumatic infection was obtained in 45 cases (44·10 per cent.).

The Wassermann reaction was tested in 54 of the aortic cases, and was positive in 9 cases and negative in 45 cases. Four cases of uncomplicated angina pectoris were treated during the year, two cases of thoracic aneurism and 7 cases of congenital heart disease.

The high proportion of male patients, and of patients suffering with aortic disease, is due to the fact that the majority of patients at present attending the Department are war pensioners.

Electro-cardiographic examinations have been made in 574 cases since the Department was opened: of these the electrocardiograms were normal in 174 instances. Abnormalities were found as follows: Premature auricular beats, 28 cases; premature ventricular beats, 67 cases ; paroxysmal tachycardia, 15 cases ; heart block, 51 cases (of which block of the right branch of the bundle were found in 11) ; sinu-auricular block, 2 cases ; auricular fibrillation, 154 cases ; auricular flutter, 5 cases ; sinus arrhythmia, 27 cases ; right or left ventricular preponderance, 138 cases.

REPORT

OF THE

NOSE AND THROAT DEPARTMENT, 1921.

By WALTER G. HOWARTH, M.A., M.B., B.Ch.Cantab.,
F.R.C.S.Eng.,
SURGEON TO THE DEPARTMENT.

THE statistical report of the Department is drawn up on somewhat similar lines to those of previous years. The figures for the Out-Patient Department only include those cases with out-patient letters, and do not take account of the large number of the more simple cases that are dealt with by the officers of the Department in Casualty each day.

Nor do they include the cases sent from other departments, such as the Eye Department, Skin Department, and Tuberculosis Dispensary.

As regards the operations, since the Department has become responsible for all tonsil and adenoid operations in the out-patients no statistical record is presented, and only those operations performed on in-patients are recorded.

Total Number of Cases treated in the Out-Patient Department during the Year 1921.

	Disease.	Number of patients.
A.	Affections of mouth, fauces and tonsils	165
B.	,, of nose and accessory cavities	266
C.	,, of pharynx and œsophagus	68
D.	,, of larynx	71
E.	,, general and miscellaneous	6
	Total	576

A. *Affections of Mouth, Fauces, and Tonsils.*

Disease.	Number of patients.
Acute tonsillitis	8
Peritonsillitis	2
Chronic follicular tonsillitis	138
Epithelioma of tonsil	4
Syphilitic ulceration of tonsil	5
Cyst of tonsil	1
Epithelioma of palate	3
Stomatitis and glossitis	2
Lingual varix	1
Syphilitic ulcer of tongue	1
Total	165

B. *Affections of Nose and Accessory Cavities.*

Disease.	Number of patients.
Epistaxis	8
Fractured nasal bones	2
Papilloma of vestibule	1
Eczema of vestibule	2
Furuncle of vestibule	1
Foreign body in nose	1
Hæmangeioma of septum	2
Traumatic ulcer of septum	1
Lupus of nose	1
Paroxysmal rhinorrhœa	6
Deflected nasal septum	111
Acute ethmoiditis	2
Chronic suppurative ethmoiditis	59
Acute frontal sinusitis	2
Chronic frontal sinusitis	3
Acute maxillary antritis	2
Chronic maxillary antritis	9
Hypertrophic rhinitis	39
Dry rhinitis	5
Atrophic rhinitis	4
Syphilitic rhinitis	4
Total	265

C. *Affections of Pharynx and Œsophagus.*

Disease.	Number of patients.
Acute pharyngitis	5
Chronic pharyngitis	52
Carcinoma of deep pharynx	2
Dysphagia	9
Total	68

D. *Affections of the Larynx.*

Disease.	Number of patients.
Acute laryngitis	11
Chronic laryngitis	21
Syphilitic laryngitis	5
Tuberculous laryngitis	7
Complete recurrent paralysis (right)	2
,, ,, ,, (left)	2
Functional aphonia	9
Soft fibroma of vocal cord	4
Papilloma of vocal cord	1
Singer's nodes	1
Carcinoma of vocal cord	2
Carcinoma of pyriform fossa	6
Total	71

E. *General and Miscellaneous.*

Disease.	Number of patients.
Cellulitis of neck	1
Mucocele of lachrymal sac	4
Dry tracheitis	1
Total	6

Table of Operations performed (In-patients).

Enucleation of tonsils and removal of adenoids	302
Carcinoma of tonsil	6
Submucous resection of septum	90
For nasal polypi and ethmoiditis (internal route)	53
Complete exenteration of ethmoid	7
Intranasal maxillary antrotomy	11
Partial turbinectomy	6
For hæmangeioma of septum	1
Radical frontal sinus operation	10
Œsophagoscopy	36
Removal of foreign bodies from œsophagus	10
For carcinoma of larynx	2
,, fibroma of vocal cord	4
,, fibroma of larynx	1
Laryngo-fissure	2
For carcinoma of pharynx	6
,, transthyroid pharyngotomy	2
,, epithelioma of palate	1
,, papilloma of cheek	2
,, rodent ulcer	4
,, lupus of nose	4
,, cyst of orbit	1
,, epistaxis	1
,, foreign body in nose	1
Intranasal dacryocystotomy	3
Total	556

With regard to the operations it may be mentioned that of the tonsil cases the large majority were dealt with by the modified blunt guillotine method, only about 5 per cent. requiring dissection. Frontal sinus cases needing radical external operation were all dealt with by the method described elsewhere.*

Malignant disease of the pharynx was chiefly dealt with by the diathermic procedure, in most cases a complete removal being effected by this means. One of the laryngo-fissure cases was undertaken for a growth on the ventricular band which proved to be a basal-celled carcinoma. A detailed description is recorded elsewhere.†

The most interesting of the foreign body cases were those of a woman with a tooth plate (4 teeth and 2 hooks) impacted 34 cm. from the teeth, and of a man with a large jagged piece of mutton-bone at the level of the tracheal bifurcation. In spite of the fact that there was considerable laceration of the œsophageal wall owing to previous manipulation, recovery in each case was uninterrupted after extraction of the foreign body.

For the extraction of the simpler foreign bodies (coins, etc.) no anæsthetic was employed.

---

* *Journal of Laryngology*, September, 1921.

† *Ibid.*, June, 1922.

ADLARD AND SON AND WEST NEWMAN, LTD., IMPR., LONDON AND DORKING.

St. Thomas's Hospital Medical School.

(UNIVERSITY OF LONDON.)

PROSPECTUS

FOR THE

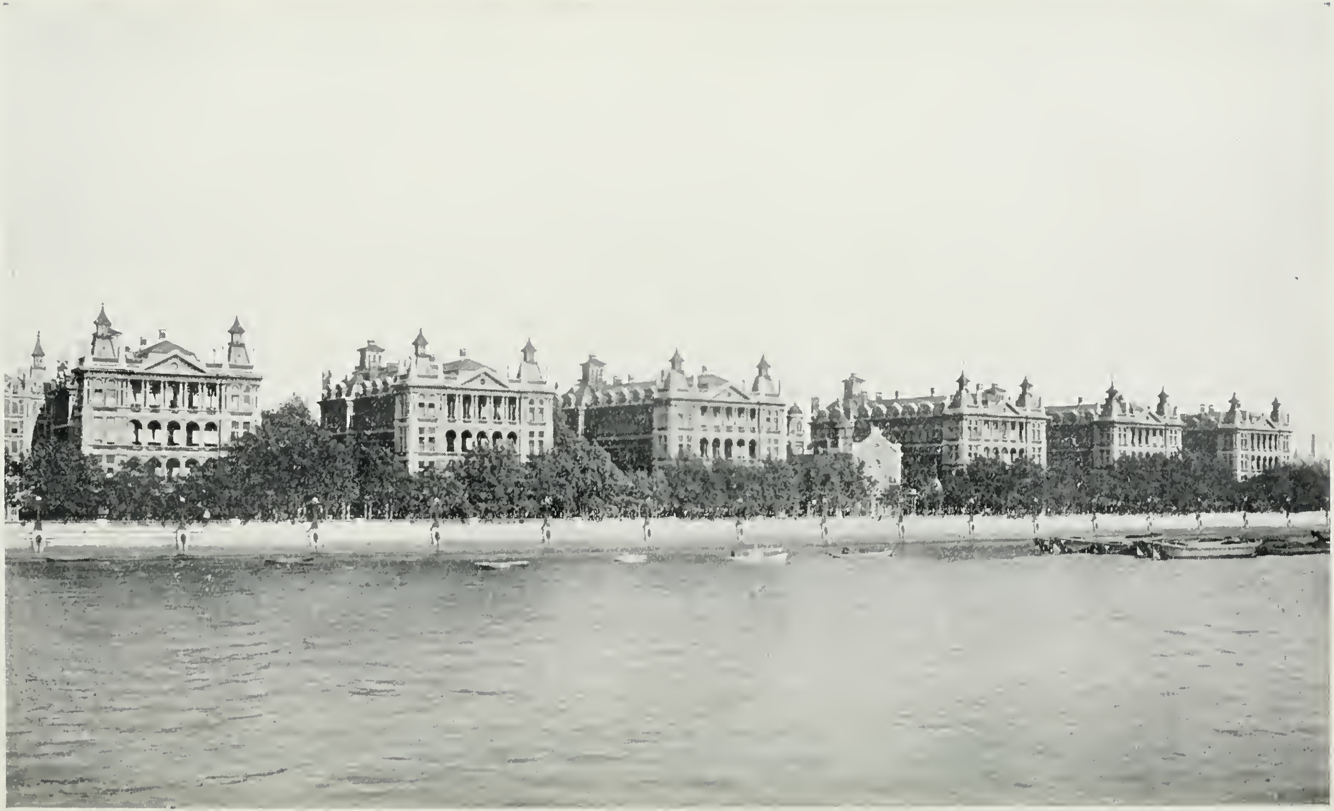
YEAR COMMENCING OCTOBER, 1922.

1922 & 1923.

LONDON
PRINTED BY W. P. GRIFFITH & SONS LIMITED,
PRUJEAN SQUARE, OLD BAILEY, E.C. 4.

CONTENTS.

Advice to Students .. 8, 9, 10
Amalgamated Clubs .. 43
Annual Dinner .. 5
Appointments open to Students .. 38, 39
Course of Study Recommended .. 8 to 12
Examinations at Medical School .. 35, 36, 37, 38, 40
Fees .. 41, 42
Historical Notice of the Hospital .. 5, 6
Hospital, Description of the .. 6, 7, 8
Hospital Practice .. 26 to 28
Lecturers and Demonstrators .. 15, 16
Lectures, Classes and Demonstrations .. 18 to 26
" " Time Tables 28 to 34
Library .. 17
Medical and Physical Society .. 43
Medical and Surgical Officers .. 13, 14
Midwifery, Practical Instruction in .. 7, 27
Museums .. 17
Operations, Days and Times of .. 33, 34
Patients, Number of .. 6, 7
Prizes, Medals and Scholarships .. 35 to 38
Regulations for Students .. 11, 12, 40
School Buildings .. 17
Special Departments .. 7, 8, 27, 28, 33, 34
Students' Clubs, Social and Athletic .. 43
Tables of Days and Hours of Attendance .. { In the Wards, Out-Patients, and the Special Departments .. } 32, 33, 34
Tutorial Classes and University Classes .. 19 to 26



ST. THOMAS'S HOSPITAL, VIEW FROM RIVER.

St. Thomas's Hospital
MEDICAL SCHOOL.

The Winter Session 1922-1923 will begin on Tuesday October 3rd and end in March.

The Summer Session will begin on Tuesday, May 1st, and end in July.

The Prizes will be distributed in the latter part of the Summer Session.

The Annual Dinner of past and present Students will take place at the Princes' Restaurant, Piccadilly, W., on Friday, November 10th, Sir Charles Scott Sherrington, G.B.E., M.A., M.D., D.Sc., F.R.C.P., P.R.S., in the chair.

For information on all matters relating to the Medical School, Prizes, Scholarships, &c., application should be made to the Medical Secretary to the School, A. ELLIOT, Esq., M.A., M.D., C.M., at the Hospital, Albert Embankment, S.E. 1., personally 10 to 4 (Saturdays excepted), or by letter. Telephone Hop. 1870.

The Dean will be glad to have a personal interview with Parents or Guardians of intending Students by appointment.

ST. THOMAS'S HOSPITAL.

The exact date of the foundation of the first Hospital of St. Thomas is unknown; but since it was dedicated to St. Thomas à Becket, who was canonised in 1172, and as the building was destroyed by fire in 1207 its origin may be fixed between those two dates. It was the property of the Church, and was situated within the precinct of the Priory of St. Mary Overie, in the Borough of Southwark. After the disaster of 1207 a temporary building was used so that the work of charity did not fail in the 21 years which elapsed before the new Hospital was ready for use. In 1228, the new building, in close proximity to the old, but on the other or eastern side of the road, received its charter, in which it is worth noting that it was described as "ye ancient Spitil." In the year 1538 the Hospital, still known as St. Thomas à Becket's Spitil, was surrendered to King Henry VIII. at the time of the general confiscation of church properties. Evidence of the good work which the old Hospital had been doing is clearly given by the fact that the necessity for its re-establishment soon made itself felt, and was satisfied only by the issue of a new charter with re-endowments and privileges in the year 1553 under the hand of King Edward VI. At the same time its dedication was transferred from St. Thomas à Becket to St. Thomas the Apostle.

From its foundation to the year 1862 the Hospital occupied its old site, but in that year the property was sold for the railway extension and the transfer to the present position was shortly after carried into effect.

The present buildings occupy an imposing position on the Surrey or south bank of the river, facing the Houses of Parliament, while their opposite aspect overlooks one of the poorest districts in London. Between the poverty-stricken streets of Lambeth and the Hospital there lies, however, a considerable tract of ground which was formerly attached to Lambeth Palace and was generously given for the use of the public by the Archbishop of Canterbury. Just beyond the extreme limit of the Hospital is the Palace itself. These few words will show how uniquely suited is the site to the character of the institution. On the one side it faces the wealth of the west, on the other the squalor of the east, while the river on the one side and the public park on the other provide the free access of light and air which are absolutely essential for the welfare of the sick. The foundation stone was laid by her late Majesty Queen Victoria in the year 1868, and the buildings were declared open by her on their completion in 1871. The cost was approximately £600,000, a large sum, certainly, but hardly excessive when it is realised that the frontage of the edifice is no less than 570 yards in length, and that the very advantages of its position rendered necessary an adequate architectural treatment which in fact was one of the conditions of the purchase of the site.

The Hospital, the first to be built in accordance with modern ideas, consists of a series of blocks separate from each other but connected by corridors open to the air on all sides. Between the blocks are grassy quadrangles, and along the whole front is a broad terrace overlooking the river and overshadowed by trees, to which both patients and students have free access.

Six of the blocks are devoted to the use of patients, one other includes the Treasurer's Residence and the St. Thomas's Home for paying patients; one constitutes the Medical School. The wards, with the exception of three which are placed on the ground floor, occupy the first, second, and third floors. Each ward affords accommodation for 28 beds which are placed against the piers between the windows so as to secure thorough ventilation. In a small ward attached to each large one there are two beds for cases requiring special care or treatment.

The present hospital contains in all 632 beds. There are separate wards for the treatment of diseases peculiar to women (30 beds); of maternity cases (21 beds); of diseases of the eye (25 beds); of diseases of the ear, nose and throat (22 beds); of children under 6 years of age (34 beds); for venereal cases, tuberculosis, infectious disease, and for the reception of casualty cases.

The space provided for each bed in the ordinary wards is upwards of 1,800 cubic feet, and in the block appropriated to infectious diseases about 2,500 cubic feet.

During the twelve months ending December 31st, 1921, the number of patients admitted into the Hospital amounted to 8,969. In the same period, 31,493 out-patients have been treated. In the Maternity

Department, 1,482 women have been treated of which 654 were admitted to the hospital and 828 were treated at their own homes. Casualties, to the number of 117,304 attendances, were treated during the same period.

A Nurses' Home affording accommodation for 185 Nurses is attached to the Hospital.

The **Casualty Department** comprises a spacious receiving hall which runs the whole length of the department, and from which, on the one side, open out sorting and waiting rooms, whilst on the other are a number of smaller rooms for the examination and treatment of patients.

Isolation rooms for infectious cases are placed without the entrance.

The whole department is tiled, efficiently lighted and fitted throughout on the most modern lines. The ventilation is on the Plenum system. In connection with the department there are an Accident Ward of 20 beds for the reception of urgent male cases, a small but complete operation theatre, and two isolation rooms.

The Department for **Out-patients** is well adapted both for the treatment of patients and for teaching purposes.

Large rooms for the use of the Physicians and Surgeons to Out-patients open directly from the main waiting room. These are well lighted and ventilated, and are provided with ample sitting accommodation in raised tiers, so that large numbers of students can follow the methods of examination and treatment employed by the Physicians and Surgeons on duty.

An Operation Theatre with modern fittings is attached to the Department for the sole use of the Out-patient Staff, their Assistants and the Directors of the various Special Departments.

There is also a series of rooms for dressing surgical cases and for the use of the various special departments.

There are four chief **Operating Theatres** for the Surgical Wards. These have impervious floors, walls and seats, and are lighted and equipped in the most modern way. There is a complete set of anæsthetizing, sterilizing, dressing and recovery rooms attached to each pair of theatres, which with the new wards are supplied by the Plenum system with filtered air. Besides these there are five other fully-equipped theatres for operations in the various departments of the Hospital.

The **Hospital Laboratories** are situate on the east front. A full description of these will be found on page 24.

The **Clinical Lecture Theatre** is arranged for the delivery of Clinical Lectures, Demonstrations and the courses of Lectures on Medicine and Surgery. Its central position in the Hospital makes it possible to illustrate the lectures by patients brought from the wards and out-patient rooms. Provision is made for the exhibition of lantern slides and for ophthalmological, laryngological, and microscopical demonstrations. An Epidiascope has recently been installed.

The **Röntgen Ray Department** has proved of such value to the Hospital that again it has been found necessary to considerably increase its accommodation and at the same time widen its scope so as to include the latest applications of electricity both for diagnosis and treatment. The department has a number of separate rooms for the application of the Finsen light treatment of lupus and other skin diseases, for electric baths, for the use of high frequency and high tension currents, and for ionisation.

Tuberculosis Department.—A Tuberculosis Dispensary has been installed by the Governors of the Hospital for the systematic treatment of tuberculosis, and for instruction of students in the diagnosis and treatment of that infection. The department is in charge of Dr. G. T. Hebert. Attached to the Dispensary is a ward containing 10 beds which are utilised where diagnostic methods or special lines of treatment call for closer supervision than the Dispensary affords. The resources of the X-ray and Pathological departments and of the Clinical Laboratory are freely used. The Dispensary is approved by the Local Government Board as part of the Borough of Lambeth Scheme for dealing with tuberculosis in the inner wards of the district. Students are appointed as Clinical Clerks in the Tuberculosis Department after they have completed their ordinary clerking and dressing in the hospital.

Venereal Department—In close association with the scheme of the Ministry of Health and of the London County Council, the Venereal Department, under the direction of Col. L. W. Harrison, D.S.O., is open daily for the diagnosis and treatment of all cases of venereal disease. The daily demonstrations are open to medical men in general practice as well as to the students of the hospital.

The Department comprises two wards for the treatment of in-patients, and a large and well-equipped out-patient clinic, provided with the necessary laboratories for diagnosis and investigation.

The Department is open daily (except Sunday) from 8 a.m. till 10 p.m. Special Clinical Demonstrations are given by the Director on Thursdays at 11.30 a.m. and on Fridays at 5.30 p.m. Senior Students are appointed as Clinical Clerks in the Department for periods of three months.

Completely fitted departments for the employment of **Physical Exercises** and **Electro-Therapeutics** in the treatment of disease and injury are working in connection with the **Orthopædic Department.** (See also page 23).

An **Electro-Cardiographic apparatus** has been installed in a convenient laboratory in the Main Corridor.

ADVICE TO STUDENTS ABOUT TO ENTER THE MEDICAL PROFESSION.

To students who commence their medical education in London, two alternative curricula are open: the one leads up to the Diplomas (M.R.C.S., L.R.C.P.) of the Conjoint Board, the other to the Degrees (M.B., B.S.) of the University of London. The courses of study are nearly equal in length (for the Conjoint Diploma 5 years, for the University Degree 5½ years), and the arrangement of work practically the same. For the London University Degree, however, a higher standard is demanded, particularly in the earlier subjects of the curriculum, than for the examinations of the Conjoint Board, and while the general scheme of study in the Medical School at St. Thomas's is adapted for either course, certain special classes are provided to meet these greater requirements. The majority of medical students in London take the Final Examination for the Diplomas of the Conjoint Board even if they are members of a University, and are proceeding to a University Degree. In fact it is wise for all to do this as the diplomas are a stepping stone to certain higher qualifications.

Preliminary Examinations.—Before entering on any course of Medical Study it is necessary for the student to have passed a Preliminary Examination in General Knowledge. For the University of London Degrees the usual Preliminary Examination is the "Matriculation," and for the Conjoint Diploma the Examination of the College of Preceptors, but various other Examinations are accepted by the Examining bodies in lieu of those named. Full particulars may be obtained on application to the Academic Registrar, University of London, South Kensington, S.W. 7, or to the Secretary, Examining Board in England, 12, Queen Square, Bloomsbury, W.C.

A student who has not passed such an examination is strongly recommended to pass the Matriculation of the University of London, and is advised to include Chemistry and other Science subjects as far as may be possible. Changes have recently been made in this examination by which the number of compulsory subjects is reduced and at the same time the range of choice widened. It possesses the great advantage of forming the first step on the road to a medical *degree*, the importance of which can hardly be over estimated.

Registration.—The commencement of Medical Study cannot be registered at the Office of the General Medical Council until the Student has attained the age of 16 years, has passed a Preliminary Examination recognised by the General Medical Council, and has produced evidence that he has commenced Medical Study at a University or School of Medicine, or at a Teaching Institution recognised by one of the Licensing Bodies and approved by the Council. The regulation of the General Medical Council with regard to Registration may be had from Messrs. Constable & Co., Ltd., 10, Orange Street, London, W.C. 2.

Note.—On and after 1st January, 1923, certain important alterations in the Regulations will come into force. These are noted in the Regulations of the General Medical Council, published in May, 1921.

CONJOINT BOARD.

Candidates who desire to obtain the Licence of the Royal College of Physicians of London and the Diploma of the Royal College of Surgeons of England are required to complete five years of professional study after passing a recognised Preliminary Examination.

The subjects of the first Examination are Chemistry, Physics and Biology, and the candidate must produce evidence of having attended not less than 180 hours instruction and laboratory work in Chemistry, 120 hours instruction and laboratory work in Physics, and 120 hours instruction and laboratory work in Biology. The Examination may be taken at any time after passing the Preliminary Examination, provided that the above amount of work can be shown.

The Second Examination consists of two parts:—I. Anatomy and Physiology. II. Materia Medica and Pharmacology. Part II. may be taken at the same time as Part I. or before or after that part, provided that the conditions of admission to the whole Examination have been fulfilled. These require anatomical dissections at a recognised Medical School for not less than twelve months, *during the regular Session*, and instruction in the other subjects for shorter periods.

Candidates are admissible to the Third or Final Examination at the expiration of two years (24 months) from the date of passing the Second Examination, and on production of the necessary Certificates of Study provided that the Examination is not completed before the expiration of five years (five winter and five summer sessions) from the date of passing the Preliminary Examination, and provided that the age of 21 years has been attained.

UNIVERSITY OF LONDON.

The duration of the course of study for the Qualifying Degree is 5½ years. As in the case of the Conjoint Board, the first year must be devoted to preparation for the First Examination for Medical Degrees (Inorganic Chemistry, Physics and General Biology). This Examination must be taken, as a rule, not less than nine months after Matriculating, but Internal Students who matriculate in January may, under certain circumstances, enter for the examination on the lapse of seven months, *i.e.* in July.

The next 18 months are devoted to study for the Second Examination for Medical Degrees, of which Part I (Organic and Applied Chemistry) can be passed not less than six months after the First Examination. Part II (Anatomy, Physiology and Pharmacology, including Pharmacy and Materia Medica) is to be passed after passing Part I, and not less than 18 months after completing the First Examination. The Third Examination for the Medical Degrees (M.B., B.S.) can be taken not less than 3* years after passing in Anatomy and Physiology at the Second Examination, Part II, and not less than 5½ years after matriculation.

* For certain exceptions see University Regulations.

UNIVERSITIES OF OXFORD AND CAMBRIDGE.

Most Students from the older Universities join the Medical School at the commencement of their fourth year, that is, after they have passed an Examination corresponding to the Second Professional of the Conjoint Board, or the Second Examination for Medical Degrees of the London University. At the end of the fourth year Oxford Students have to present themselves for an Examination in **General Pathology** and **Pharmacology**, for which a special course of study in the Medical School is arranged. Preparation for this Examination may be carried on concurrently with clinical work in the Hospital Wards or Out-patient Rooms. The Final Examination for the M.B. degree corresponds in all essentials to that for the London University degree, but Cambridge Students have in addition to write a Thesis or Essay on some medical subject.

All students are required to register their names in the Medical Secretary's office on joining the School for the first time and, annually, at the commencement of each Winter Session. Attendance at lectures, demonstrations, and clinical work is also registered.

All Students are required by the Governors to **conform to the Regulations** of the Hospital and Medical School, and the School Council is empowered, with the approval of the Treasurer, to suspend or remove a Student at any time for adequate reason.

All students are required to provide themselves with such **Instruments** as may be necessary and with a **Microscope.**

Students intending to prepare for **University Degrees and other higher Examinations** should apply to the Dean for any further information relating thereto.

Students when qualified should use every effort to obtain one or more of the senior appointments open to them, especially those of House Physician, House Surgeon, Obstetric House Physician, and Casualty Officer. These and other appointments, of which details are given elsewhere, afford free opportunities for obtaining practical professional knowledge which cannot be estimated too highly. (See pages 38 and 39.)

CURRICULUM FOR THE UNIVERSITY OF LONDON AND FOR THE DIPLOMA OF THE CONJOINT BOARD.

First Winter Session.

Biology, Chemistry, Physics, with Practical Work in each subject. Lectures.

Part III. (Elementary Biology) of the First Professional Examination of the Conjoint Board in March. Examinations.

First Summer Session.

Biology, Chemistry, Physics, with Practical Work in each subject. Lectures.

First Examination for Medical Degrees (Univ. Lond.), in July, or Parts I. and II. (Chemistry and Physics), of the "First Conjoint" in July. Examinations.

Second Winter Session.

Anatomy, Physiology, Anatomical Demonstrations and Dissections. Organic and Applied Chemistry for the Second Examination for Medical Degrees, Part I. Lectures.

"Sessional" Examination (vivâ voce) in December. Examinations.

Second Examination for Medical Degrees (Univ. Lond.) (Part I.) in March.

Second Summer Session.

Histology with Practical Work, Dissections, Organic and Applied Chemistry (for July Examination, if not already passed), Demonstrations in Practical Pharmacy, Practical Instruction in Pharmacy. Lectures.

"Sessional" Examination, written and vivâ voce in July. Examinations.

NOTE.—Students are eligible to present themselves for the "Second Conjoint" on the completion of twelve months' study of Anatomy and Physiology, subsequent to passing in two of the three parts of the First Examination (i.e., *Physics, Chemistry, Biology*). *They are strongly advised to take this examination at the earliest date possible.*

Third Winter Session.

Anatomy and Physiology with Demonstrations and Dissections, Practical and Chemical Physiology. Pharmacology with Demonstrations. Lectures.

"Sessional" Examinations in December and in March. Examinations.

Anatomy and Physiology of "Second Conjoint" in January or April.

Second Examination for Medical Degrees (Univ. Lond.) (Part II.) in March. Second "Conjoint" Part II, if not already passed.

Third Summer Session.

Elementary Course of practical instruction in Medicine, Surgery, Pathology, Bacteriology, Bio-Chemistry and Pharmacology preparatory to the commencement of Clinical Work in the Wards. For convenience of Students this course is held three times a year.

Hospital Practice, Medical and Surgical, with Clerkship or Dressership. A Post-Mortem Clerkship and Clerkship in the Pathological Laboratory should be held at the same time as the In-patient Medical Clerkship.

Pathology, including Practical instruction in Bacteriology; Midwifery; and such of the subjects of the Fourth Summer Session as time and circumstances permit. Lectures.

The course of instruction in Practical Medicine must be attended by Clinical Clerks, and the course of Elementary Practical Obstetrics by Clerks in the Gynæcological Department.

Part II. (Pharmacy) of "First Conjoint" if not already passed.

Second Examination for Medical Degrees (Univ. Lond.) (Part II.) in July if not already passed. Examinations.

Fourth Winter Session.

Lectures. Hospital Practice, Medical and Surgical.

Clinical Clerkship with Clerkship in the Post-Mortem Room, or Pathological Laboratory (if not already held); or Dressership. Attendance at a recognised Fever Hospital.

Medicine, Surgery, Pathology, Practical instruction in Clinical Pathology, Practical Surgery, Pharmacology, Applied Anatomy.

Clinical Lectures in Medicine and Surgery.

Fourth Summer Session.

Lectures. Hospital Practice, Medical and Surgical, with Clerkship or Dressership. Attendance at a recognised Fever Hospital, if not already done.

Pathology (continued), including Practical instruction in Bacteriology and Clinical Pathology, Forensic Medicine, Midwifery, and such of the subjects of the Fifth Summer Session as time and circumstances permit.

Fifth Winter Session.

Lectures. Hospital Practice, Medical, Surgical, the Special Departments, and attendance at Post-mortem Examinations. Clerkship or Dressership in Special Departments. Instruction in Vaccination (Fee, one guinea and a half).

Pathology (if not taken in fourth winter); Medicine, Surgery, Obstetric Demonstrations; Diseases of Women: Diseases of the Eye. Clinical Lectures on Medicine and Surgery. Applied Anatomy.

A course of instruction in Venereal Disease should be taken by all Students during the Fifth Winter or Summer Session.

Fifth Summer Session.

Lectures. Hospital Practice, Medical and Surgical, and Special Departments.

Midwifery, Mental Disease, Tropical Diseases, Public Health, Diseases of the Eye, Clinical Medicine, Clinical Surgery. Attendance at a Fever Hospital (if not already completed).

Tutorial Classes in Medicine, in Surgery (including operations upon the Dead Subject), and in Midwifery.

NOTE.—HOSPITAL PRACTICE: Students are advised, after three months' Casualty and Out-Patient Dressing, to act as Clinical Clerks in the Medical Wards for a period of six consecutive months. During the first three months, Post-Mortem Clerkships should be held in addition; and during the second three months, which are normally spent in the Clinical Medical Unit, facilities are afforded for attending a Course of Instruction in Infectious Fevers at one of the Metropolitan Asylums Board Hospitals.

Subsequently, six consecutive months should be spent as Dressers in the Surgical Wards, followed by three months' Clerkship in the Department of Midwifery* and Gynæcology.

The remainder of the time at the Students disposal should be devoted to the Special and Out-Patient Departments and to "Senior Rounds" in the Wards.

Students are reminded of the great importance of a Course of Instruction in the Clinical Laboratory at some period of their Clinical Work.

---

* Maternity Cases may be attended by Students who have passed the Second Examination for Medical Degrees, or the "Second Conjoint," who have attended the Lectures on Midwifery and a course of Practical Obstetrics, and who have acted as Clerks and Dressers. Maternity cases are attended in the Maternity Ward in conjunction with Clerking in the Ward for Diseases of Women. One month is spent in the Maternity Ward, and afterwards Maternity Cases are conducted for a period of two weeks in the patients' own homes in the out-district under supervision of the Obstetric House Physicians. See also pages 20 and 21.

N.B.—Clerks in the Post-Mortem Room or attending Fever Courses are not allowed to attend Maternity Cases.

Medical and Surgical Officers of the Hospital.

Consulting Physicians.—Sir Seymour J. Sharkey, M.A., M.D. Oxon. T. D. Acland, M.A., M.D., Oxon., H. P. Hawkins, C.B.E., M.A., M.D. Oxon., H. W. G. Mackenzie, M.A., M.D. Cantab., R. Percy Smith, M.D. Lond., E. Stainer, M.A., M.D. Oxon. H. G. Turney, O.B.E., M.A., M.D. Oxon. J. J. Perkins, M.A., M.B. Cantab.

Emeritus Physician—F. F. Caiger, M.D. Lond.

Consulting Surgeons.—Sir George H. Makins, G.C.M.G., C.B., W. H. Battle, Sir Charles A. Ballance, K.C.M.G., C.B., M.V.O., M.S. Lond., E. M. Corner, M.A., M.Ch. Cantab.

Consulting Obstetric Physician.—H. Gervis, M.D. Lond.

Consulting Ophthalmic Surgeon.—J. B. Lawford.

Consulting Anæsthetists.—Walter Tyrrell, H. Low, M.A., M.B., B.Ch. Cantab.

Consulting Dentist.—C. E. Truman, M.A. Cantab.

Consulting Chemical Pathologist.—Prof. H. MacLean, M.D. Aberd., D.Sc. Lond.

Physicians.

C. R. Box, B.Sc., M.D., B.S. Lond.
A. E. Russell, M.D., B.S. Lond.
E. F. Buzzard, M.A., M.D. Oxon.
H. MacLean, M.D. Aberd., D.Sc., Lond.

Surgeons.

Sir Cuthbert S. Wallace, K.C.M.G., C.B., M.B., B.S. Lond,
Percy Sargent, C.M.G., D.S.O., M.A., M.B., B.Ch. Cantab.
C. A. R. Nitch, M.S. Lond.
J. E. Adams, M.S. Lond.

In Charge of Out Patients.

M. A. Cassidy, M.A., M.D., Cantab.
J. L. Birley, C.B.E., M.A., M.D. B.Ch. Oxon.
H. L. Tidy, M.A., M.D., B.Ch. Oxon.

C. M. Page, D.S.O., M.S. Lond.
W. H. C. Romanis, M.A., M.B., M.Ch. Cantab.
B. C. Maybury, M.B., B.S. Lond.
P. H. Mitchiner, M.S., M.D. Lond.

SPECIAL DEPARTMENTS.

Ophthalmic.—J. H. Fisher, F.R.C.S., A. C. Hudson, F.R.C.S.

Obstetric and Gynæcological—J. S. Fairbairn, M.A., M.B., B.Ch. Oxon. J. P. Hedley, M.A., M.B., M.Ch. Cantab., In charge of O.P., J. M. Wyatt, M.B., B.S. Lond.

Neurological.—E. F. Buzzard, M.A., M.D. Oxon.

Diseases of Children.—R. C. Jewesbury, M.A., M.D. Oxon., C. R. Box, B.Sc., M.D., B.S. Lond..

Diseases of Ear.—H. J. Marriage, F.R.C.S.

Diseases of Throat.—W. G. Howarth, F.R.C.S.

Diseases of Skin.—S. E. Dore, M.A. M.D. Cantab.

Mental Diseases.—W. H. B. Stoddart, M.D. Lond.

Electro-Cardiographic.—M. A. Cassidy, M.A., M.D. Cantab.

SPECIAL DEPARTMENTS—*continued.*

Orthopædic Dept.—Sir Robert Jones, K.B.E., C.B., F.R.C.S., W. Rowley Bristow, M.B., B.S. Lond., F.R.C.S.

X Ray.—Sir Archibald D. Reid, K.B.E., C.M.G., C. Gouldesbrough, B.A., M.B., B.Ch. Oxon. G. Fildes, M.B., Ch.B. Manch.

Electro-Therapeutics. — G. Murray Levick, M.R.C.S., L.R.C.P.

Massage.—James Mennell, M.A., M.D., B.Ch. Cantab.

Swedish Remedial Exercise.—R. T. Timberg, M.R.C.S., L.R.C.P.

Tuberculosis.—G. T. Hebert, M.A., M.D. Oxon.

Dental.—R. McKay.

Venereal Dept.—Col. L. W. Harrison, D.S.O., M.B., Ch.B., T. Anwyl-Davies, M.B., B.S., Lond., W. M. de M. Peyton, O.B.E., B.A., M.B. B.Ch.

Curator of the Museum and Pathologist.

Prof. S. G. Shattock, F.R.S., F.R.C.S.

Director of Pathology and Bacteriologist to the Hospital.

Prof. L. S. Dudgeon, C.M.G., C.B.E., F.R.C.P. Lond.

Chemical Pathologist.

O. L. V. S. de Wesselow, B.A., M.B., B.Ch., Oxon.

Assistant Pathologists and Bacteriologists.

A. L. Urquhart, O.B.E., M.B., Ch.B. Edin., D.P.H. Lond.
J. F. Taylor, B.A., M.D. B.Ch. Cantab.
F. Bamforth, M.D., Ch.B., D.P.H. Liverpool.

Anæsthetists.

Z. Mennell, M.B. Lond.
E. W. Hedley, M.B.E., M.A., M.D. B.Ch. Cantab.
E. V. Dunkley, M.D. Lond.
H. B. Wilson, O.B.E. M.A., M.B., B.Ch. Cantab.
L. W. Shelley, M.C., B.A., M.B., B.Ch. Cantab.

Consulting Chemist.

Prof. R. H. A. Plimmer, D.Sc.

Pharmaceutist.

J. A. Jennings, Ph.C.

Resident Assistant Physician.

L. B. Maxwell, O.B.E., B.A., M.B., B.Ch. Cantab.

Resident Assistant Surgeon.

P. H. Mitchiner, M.S., M.D. Lond.

Registrars.

Medical.	*Surgical.*	*Obstetric.*
H. B. Russell, M.D. Lond.	R. H. O. B. Robinson, B.A., M.B., B.Ch. Cantab.	A. H. Richardson, M.A., M.B., B.Ch. Cantab.

Ophthalmic.—P. G. Doyne, B.A., M.B., B.Ch. Oxon.

Orthopædic.—G. Perkins, M.C., M.B., M.Ch. Oxon.

Librarian.

Prof. F. G. Parsons, F.R.C.S.

Assist. Librarian.

C. M. Wood.

LECTURERS AND DEMONSTRATORS.

Biology and Practical Biology	Mr. W. Rushton and Mr. H. G. Billinghurst.
Chemistry and Practical Chemistry ...	Prof. R. H. A. Plimmer and Mr. C. C. Wood.
Physics and Practical Physics	Mr. J. H. Brinkworth and
Anatomy, Descriptive and Comparative	Prof. F. G. Parsons.
Practical Anatomy	Prof. F. G. Parsons, Mr. J. M. G. Swainson and Demonstrators.
Applied Anatomy (Medical)	Dr. C. R. Box.
Applied Anatomy (Surgical)	Mr. B. C. Maybury.
Physiology and Practical Physiology...	Prof. J. Mellanby and Mr. A. St. G. Huggett.
Histology	Prof. J. Mellanby and Mr. A. St. G. Huggett.
Pharmacology	Dr. V. J. Woolley.
Practical Pharmacy	Mr. J. A. Jennings.
Special Pathology	Prof. L. S. Dudgeon and Dr. A. L. Urquhart.
General Pathology and Bacteriology	Prof. S. G. Shattock, Prof. L. S. Dudgeon, Dr. J. F. Taylor, and Dr. F. Bamforth.
Practical Pathology and Bacteriology	Dr. A. L. Urquhart.
Chemical Pathology	Dr. O. L. V. de Wesselow.
Morbid Anatomy	Dr. A. L. Urquhart, Dr. J. L. Birley, Dr. H. L. Tidy, and the Medical Registrar.
Forensic Medicine and Toxicology ...	Dr. Edwin Smith.
Toxicology, Demonstrations	Mr. C. C. Wood.
Public Health and Sanitary Science...	Dr. T. Carnwath.
Medicine...	The Physicians.
Clinical Medicine	The Physicians.
Practical Medicine	The Physicians to Out-patients.
Surgery	The Surgeons.
Clinical Surgery	The Surgeons.
Practical and Manipulative Surgery...	The Surgeons to Out-Patients.
Operative Surgery	Mr. J. E. Adams.
Midwifery and Diseases of Women ...	Dr. J. S. Fairbairn, Dr. J. P. Hedley and Mr. J. M. Wyatt.
Clinical Midwifery and Gynæcology...	Dr. J. S. Fairbairn, Dr. J. P. Hedley, Mr. J. M. Wyatt, and Mr. A. H. Richardson.

LECTURERS AND DEMONSTRATORS—*continued.*

Practical Midwifery and Gynæcology	Dr. J. P. Hedley and Mr. J. M. Wyatt.
Diseases of Children	Dr. R. C. Jewesbury and Dr. C. R. Box.
Diseases of the Eye	Mr. J. H. Fisher and Mr. A. C. Hudson.
,, ,, *Throat*	Mr. W. G. Howarth.
,, ,, *Ear*	Mr. H. J. Marriage.
,, ,, *Skin*	Dr. S. E. Dore.
,, ,, *Teeth*	Mr. R. McKay.
Anæsthetics	Dr. Z. Mennell.
Practical Anæsthetics	The Anæsthetists.
Orthopædics	Sir Robert Jones and Mr. W. Rowley Bristow.
Mental Diseases	Dr. W. H. B. Stoddart.
Tuberculosis	Dr. G. T. Hebert.
Venereal Disease	Col. L. W. Harrison.
Electro-Cardiography	Dr. M. A. Cassidy.
Radiology	Sir Archibald D. Reid, Dr. C. Gouldesbrough and Dr. G. Fildes.
Massage	Dr. J. B. Mennell.
Electro-Therapeutics	Mr. G. Murray Levick.
Swedish Remedial Exercises	Mr. R. T. Timberg.
Vaccination	Dr. A. E. Cope.

Clinical Medical Unit.

Director.—Prof. H. MacLean, M.D. Aberd., D.Sc. Lond.
Deputy-Director.—Isaac Jones, M.D., B.S. Melb.
First Assistant.—K. B. Aikman, M.A., M.B., B.Ch. Cantab.

Clinical Surgical Unit.

Director.—Sir Cuthbert Wallace, K.C.M.G., C.B., M.B., B.S. Lond.
Deputy-Director.—B. C. Maybury, M.B., B.S. Lond.
First Assistant.—

Pathologist to the Units.

S. C. Dyke, B.A., M.B., B.Ch., D.P.H. Oxon.

Dean of the School.

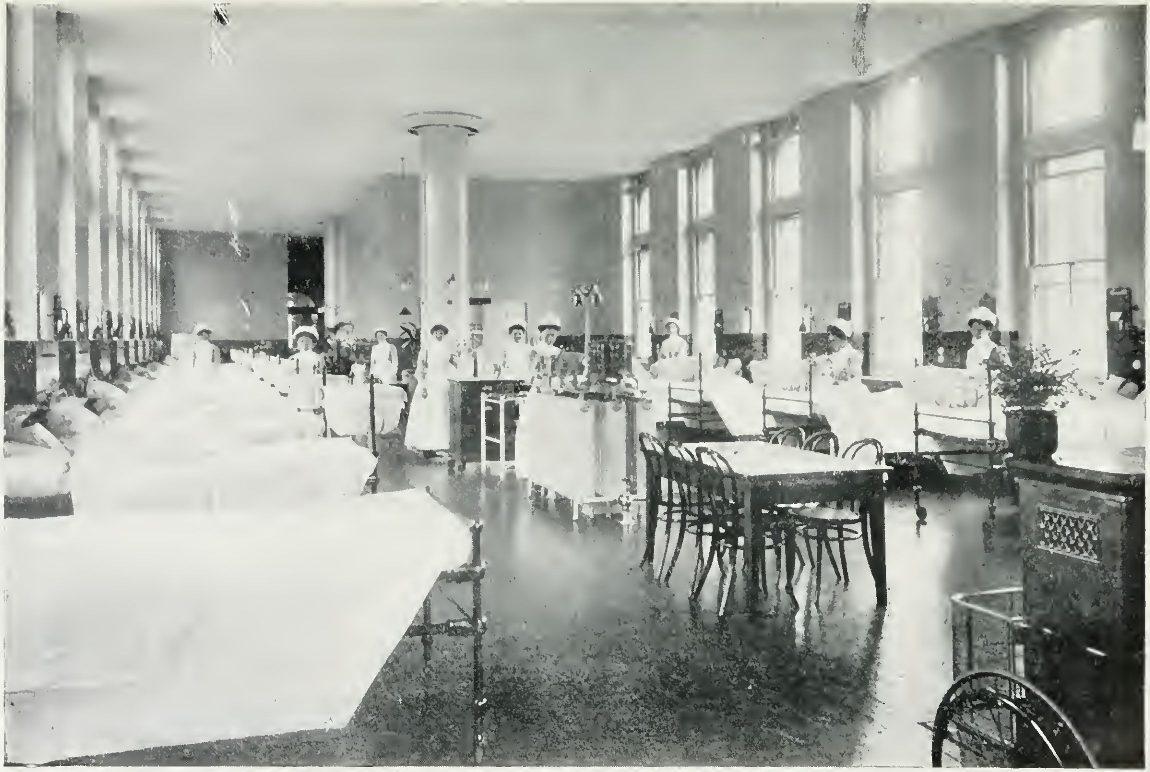
Sir Cuthbert S. Wallace, K.C.M.G., C.B.

Tutors.

Oxford.	*Cambridge.*	*London.*
J. L. Birley, C.B.E., M.A., M.D., B.Ch. Oxon.	W. H. C. Romanis, M.A., M.B., M.Ch. Cantab.	C. R. Box, M.D., B.S., B.Sc. Lond.

Medical Secretary to the School.

A. Elliot, M.A., M.D. C.M. (Hop 1870.)



THE MATERNITY WARD.

THE MEDICAL SCHOOL.

The School buildings, separated by a large quadrangle from the Hospital, stand at its southern extremity, between the river and the gardens of Lambeth Palace.

THE LIBRARY AND READING ROOM.

Librarian—Prof. F. G. PARSONS, F.R.C.S.
Asst. Librarian—Mr. C. M. WOOD.

The Library, which overlooks the river, is quiet, spacious and well ventilated. It has recently been completely re-arranged and re-catalogued and contains a valuable collection of standard works, both old and new. The supply of current text-books is kept well up-to-date, so that a student has every inducement to occupy his time fully while in the Medical School. Most of the medical and scientific periodicals are taken in.

THE MUSEUMS.

The Pathological Collection, under the care of Professor S. G. Shattock, contains above 3,000 preparations, which illustrate all the morbid lesions of importance met with in the various organs of the body. The present descriptive catalogue has been entirely re-written by the Curator. The Collection includes many specimens of historical interest, such, *e.g.*, as those used by Sir A. Cooper to illustrate his works on Dislocations and Fractures, on Hernia, and diseases of the Testis; as well as two preparations showing the result of ligature of the Abdominal Aorta, and Mr. Travers's preparations exhibiting the natural process of repair of Injuries of the Intestines, and results of the experimental ligature of Arteries. The section of Fractures contains numerous examples of gun-shot injuries, obtained from cases under the care of Sir William MacCormac during the Franco-German War (1870). A certain number of instructive specimens have, likewise, been added from the Great War (1914-19).

From the General Collection a **Type Series** has been selected to illustrate Medical, Surgical, and Gynæcological Pathology. This series of Specimens is displayed on the ground floor of the Museum, and is furnished with a specially prepared Card Catalogue.

The Marble Bust of Morgagni in the Museum was the gift of an Italian Committee, which included the chief Professors at the various Italian Universities. It was formally presented to the Hospital by the Italian Ambassador in October, 1899.

The Materia Medica Museum contains a complete collection of the inorganic and organic substances included in the British Pharmacopœia; all these are named and numbered. A second collection of the chief medicinal substances is placed in drawers and is freely accessible to students.

The Collection of Chemical and Mineralogical Specimens is under the superintendence of the Professor of Chemistry. The majority of the specimens were presented by the late Dr. Bernays.
The Museums are open daily from 9 a.m. till 5 p.m.

LECTURES, CLASSES, & DEMONSTRATIONS.

BIOLOGY (BOTANY AND ZOOLOGY.)

MR. W. RUSHTON AND MR. H. G. BILLINGHURST.

A commodious BIOLOGICAL LABORATORY is in the Main School Buildings.

Courses of Lectures, including Practical Work, are held during the Winter and Summer Sessions in preparation for the First Examination for Medical Degrees, Univ. Lond. and for other corresponding Examinations. Revision Classes and Test Examinations are held periodically.

A six months' practical course to meet the requirements of the "Conjoint Board" is held from October to March, and a revision class from May to July.

CHEMISTRY.

PROF. R. H. A. PLIMMER and MR. C. C. WOOD.

THE CHEMICAL DEPARTMENT is complete in itself. In addition to a large laboratory for class purposes there are private laboratories for research work. The department has its own lecture theatre.

A systematic Course of LECTURES on Inorganic, Organic and Physical Chemistry is given during the Winter and Summer Sessions. These lectures, which are fully illustrated by experiments, may be supplemented by a course of tutorial classes.

Courses of practical instruction in Chemistry as required for the First and Second Examinations for Medical Degrees (Univ. Lond.), and for the Examinations of the Conjoint Board, extend over the Winter and Summer Sessions.

Arrangements may be made for additional Practical Work (Elementary and Advanced) in the Chemical Laboratory at fees which may be ascertained from the Medical Secretary.

PHYSICS.

MR. J. H. BRINKWORTH.

There is a SPECIAL PHYSICS LABORATORY which is adequately provided with apparatus for practical work.

Courses of Lectures, fully illustrated by experiment, are given during the Winter and Summer sessions, and are especially adapted to the requirements of the First Examination for Medical Degrees (Univ. Lond.), and the first Professional Examination of the Conjoint Board.

The lectures are supplemented by Tutorial and Practical Classes.

ANATOMY.

PROFESSOR F. G. PARSONS.

THE DISSECTING ROOM, which is unusually large, is well equipped and well ventilated.

THE ANATOMICAL MUSEUM contains a valuable collection of dissected specimens, anatomical models, diagrams, illustrations, &c.

THE OSTEOLOGICAL MUSEUM contains beautifully mounted specimens of Human and Comparative Osteology, as well as a representative series of Skulls of all the races of Mankind. There are also cabinets of X Ray plates and of Stereoscopic Photographs.

A LECTURE THEATRE, with seating accommodation for 200 Students, renders the department complete.

LECTURES.—A six months' course, consisting of five lectures a week, is given during the Winter Session. As certain portions of the subject are dealt with more fully in alternate years, students are required to attend the course both in their second and third years.

TUTORIAL CLASSES, conducted partly by examination, partly by demonstration, are held daily during the Sessions.

A Course of special demonstrations of Surface Anatomy is given during the Summer Session, and, during the Winter Session, a course of lectures on the Application of Anatomy to Medicine and Surgery.

PRACTICAL.—During both Winter and Summer Sessions the dissecting room is open for the use of students, and the demonstrators attend daily. A number of stock preparations are displayed in the room, and the others are preserved for use in the tutorial classes.

Tutorial classes are held prior to the January, March and July examinations which all candidates are allowed to attend.

Special classes are held by the Professor and demonstrators for the Primary Fellowship Examinations of the Royal College of Surgeons in June and December. For the June Examination, the classes begin in February, and for the December Examination, in October. No additional fee for these classes is charged to Students paying the Annual Fee.

APPLIED ANATOMY.

DR. C. R. BOX and MR. B. C. MAYBURY.

A course of lectures on Applied Anatomy is given during the Winter Session. It is illustrated by Lantern Slides and Models, and may be attended by Students in their third, fourth, or fifth years.

PHYSIOLOGY.

PROF. J. MELLANBY.

The importance of physiology for the study of medicine and the investigation of disease has advanced to a considerable degree in recent years. In order to augment the facilities for the teaching of Physiology and for the extension of research, new laboratories have been provided in the East Wing of the Medical School. On the ground floor is a large laboratory, with research rooms adjoining, devoted to chemical physiology. The second floor is equipped for the teaching of histology and experimental physiology and affords ample facilities for this purpose. The third floor contains a small theatre for the purpose of demonstrating experiments on animals; one room for research involving animal experiments; a large room for research in chemical physiology, and a library. The basement of the building contains a dark room, a galvanometer room, a centrifuge room, etc. Ample teaching facilities are available for the acquisition of elementary and advanced physiological knowledge. Lectures and practical classes, elementary and advanced, are arranged for students working for the examination of the Conjoint Board, the Universities of London, Cambridge and Oxford, and the Primary Examination for the Fellowship of the Royal College of Surgeons. Special arrangements are made for candidates desirous of working for the Honours BSc. degree in Physiology at the University of London.

Provision for research is extensive and affords ample opportunities for men desirous of investigating any physiological problem. The close connection of the Laboratory with the Hospital is particularly favourable for the investigation of those branches of physiology which are intimately connected with the causation of disease.

LECTURES.—A systematic course of lectures is given throughout the Winter and Summer Sessions. As certain portions of the subject are dealt with more fully in some years than in others Students are required to attend the course both in the second and third years.

ELEMENTARY PRACTICAL PHYSIOLOGY.—An elementary practical class for second year Students is held in the first half of the Winter Session. An elementary course of Chemical Physiology, also for second year Students, is given in the second half of the Winter Session.

HISTOLOGY.—A practical class in Histology is held three mornings a week during the Summer Session, and is attended by second year Students. Each Student is practically instructed in the methods of preparing histological specimens.

TUTORIAL CLASSES in Physiology are held by the Demonstrators prior to the January, April, and July examinations of the "Conjoint Board."

ADVANCED PRACTICAL PHYSIOLOGY.—A Class in advanced *practical* Physiology is held twice a week from October to March and consists of two parts. The first half of the course is devoted to the use and study of those instruments and experiments which are fitted to class work. The second half is a course of advanced Chemical Physiology. During this class, demonstrations are given of many experiments which cannot be carried out by the Students themselves. This class is intended for those preparing for University Examinations (Cambridge, London, Oxford), or for the Fellowship of the College of Surgeons.

Special Tutorial Classes are held by the Professor and Demonstrators for the various University Examinations, as well as for the Primary Fellowship of the College of Surgeons in June and December. For the December Examination, classes begin in October, and for the June Examination, in February. No additional fee for these classes is charged to Students paying the Annual Fee.

PHARMACY, PHARMACOLOGY, AND THERAPEUTICS.

DR. V. J. WOOLLEY AND MR. J. A. JENNINGS.

THE MATERIA MEDICA MUSEUM contains a complete collection of the inorganic and organic substances included in the British Pharmacopœia ; all these are named and numbered. A second collection of the chief medicinal substances is placed in drawers and is accessible to students

Lectures and Demonstrations in Pharmacology are given during the Winter and Summer Sessions, the courses being specially adapted to the requirements of candidates for the examinations of the Universities of London, Oxford and Cambridge, and the "Conjoint Board." A class in Practical Pharmacology is held at least twice a year.

Demonstrations of Materia Medica are given in the Materia Medica Museum by Mr. Jennings and two assistants.

Special courses of Lectures, Demonstrations and practical work in Pharmacology and Elementary Pathology are held for Cambridge and London Examinations in these subjects.

PRACTICAL PHARMACY.—Each Session instruction in Practical Pharmacy and Dispensing as required by the Universities of London, Oxford, and Cambridge and the "Conjoint Board," is given by the Hospital Pharmaceutist, Mr. Jennings.

MIDWIFERY AND DISEASES OF WOMEN.

DR. J. S. FAIRBAIRN, DR. J. P. HEDLEY AND MR. J. M. WYATT.

Within the Hospital there is a complete Maternity and Child Welfare Centre and a Department for the Diseases of Women, and all are available for the instruction of students. For the last ten years each student has devoted a term of three months to the whole-time study of Midwifery and the Diseases of Women, and the work has been so arranged as to give him not only instruction in the practice of obstetrics, midwifery and gynæcology, but a wide outlook over the period of pregnancy and lying-in and of the mother and infant afterwards. The Department thus serves as an object lesson in the methods of Preventive Medicine as applied to a section of the community and a much more correct perspective of the relative importance of the different parts of the work is obtained than was formerly the case when the maternity cases were attended as an isolated event in the curriculum.

The student now begins with the pregnant woman in the Ante-natal Clinic (two mornings a week) and learns the diagnosis and treatment of the diseases and disorders of pregnancy and how to avoid preventable difficulties in labour. The more serious cases admitted for further investigation and treatment afford opportunities for more detailed observation. The actual birth he is taught to look on not as the sole or even chief object of his study, but as merely a stage, though a critical one, and one calling for special care, in the life-history of mother and infant. For a month he is drilled in the examination and management of the woman in labour in the Maternity Ward (600 deliveries per annum) and learns the work with all the resources of the Hospital to his hand ; then, for a couple of weeks, goes out in the district to apply those methods to the very different conditions he finds in the patient's own home. Throughout this service he is in close touch with the Social Workers of the Almoner's Department and thus acquires some acquaintance with what Sir George Newman emphasized, viz., the relationship of his professional studies to human society and the great social problems which he will soon discover to be pressing around him.

The second half of his term is devoted to the study of the Diseases of Women in out-patient and in-patient departments, where the results of the injuries and infections of childbed, which his previous training was designed to teach him to avoid, are seen, together with other ailments of the female reproductive tract.

By occasional visits to the Infants' Clinics he can follow the mother, watched during labour and lying-in, and her baby, whose early management he has studied, and if he proceeds to an appointment in the Children's Department, a further opportunity is afforded of learning the application of the methods of Preventive Medicine to the developing child and thus to the improvement of the physique of the race.

The work done by St. Thomas's Hospital in this direction was specially singled out for mention by the Chief Medical Officer to the Local Government Board (then Sir Arthur Newsholme) in his Official Report for 1913-14 as being "a much more elaborate organisation, comprising a large part of the work of a complete maternity centre." Since then the work has been greatly extended.

A course of Lectures is delivered during the second half of the Winter Session and the Summer Session, embracing the physiology and pathology of pregnancy, labour, and the puerperal state, and the injuries and diseases of the female reproductive tract.

A course of Obstetric Demonstrations on the model is given three times a year by Dr. Hedley.

Tutorial Classes are held prior to the January, April, and July Final Examinations of the "Conjoint Board."

THE CHILDREN'S DEPARTMENT.

Dr. R. C. JEWESBURY.

The Children's Department forms one of the Special Departments of the Hospital. The work done in this Department may be divided into—

A. Preventive Medicine.
B. Treatment of Sick Children.

The Preventive Medicine Scheme closely links up with the Maternity work of the Hospital and thus forms a continuous chain from the ante-natal period until the child is old enough to go to school, when it comes under the regular inspection of the school doctor.

In the case of babies born in the Maternity Ward of the Hospital, instruction is given with regard to their feeding and management, and after these children leave the Ward, usually at about a fortnight old, they are brought for regular periodic inspection to the "Mary Ward Clinic."

The babies born in "the District" are also brought to a similar clinic, held at another time—"the District Clinic." This Clinic also acts as a chief consultation clinic for the Infant Welfare Centres in the outlying district. The student, by attending these clinics, is able to follow up the baby he has seen through the ante-natal and natal periods and receives instruction in feeding and general management of the *normal* child throughout its first twelve months. Special instruction is given with regard to breast feeding in both these Clinics. When the child is one year old it is transferred to the "Extension Clinic," where it continues to be inspected at intervals, and such things as enlarged tonsils and adenoids, carious teeth, etc., which may affect seriously its future health and development, are detected and eradicated at any early stage. The home and social conditions of the children attending these clinics are reported on through the Lady Almoner's Department.

The student, therefore, has every possible facility for studying the physiology and development of the normal child and the prevention of disease in infancy and childhood, a subject to which the State is now attaching such great importance. The above scheme now working at St. Thomas's may be said to be one of the most complete of its kind.

If any child attending the above clinics becomes ill, it is referred for treatment with the *sick* children; in this way the healthy and the sick children are separated into two distinct classes.

For "Sick Children" there is provision in the Children's Out-Patient Department every morning, and those requiring indoor treatment are admitted to the Children's Ward. Instruction is provided for students in both these Departments.

A Special Clinic is also held for the treatment of children suffering from venereal disease.

A Speech Clinic under the direction of Miss Fogerty is held on Mondays at 10 a.m., and Wednesdays at 3 p.m.

In addition, the "Mothercraft Training Centre," 29, Trebovir Road, Earls Court, S.W., initiated by Dr. Truby King, and now under the Medical Directorship of Dr. JEWESBURY, is also attached to the Children's Department, and provides most valuable material for clinical study.

The whole Department, therefore, comprises the most complete means of study of

1. The Normal Child.
2. Prevention of Disease in Children.
3. Diseases of Children and Treatment.

Appointments in the Children's Department :—

1. The John and Temple Research Fellowship in Children's Diseases (£450 per ann.).
2. Resident House Physician.
3. Two Clinical Assistants.
4. Clinical Clerks.

CLASSES FOR CLERKS AND DRESSERS.

Students about to commence Clinical duties in the hospital are required to attend a course of preliminary instruction, the methods of physical diagnosis, and surgical technique, with which is combined instruction in Elementary Pathology, Bacteriology, and Bio-Chemistry. This series of classes is held three times a year.

MEDICINE AND SURGERY.

On account of the close inter-relation of medicine and surgery and other sciences, special subjects are taken each session and treated from the standpoints of Anatomy, Physiology, Pathology, Medicine and Surgery by the respective professors and lecturers in these branches. In this way a complete view of the subject is obtained, and much repetition is avoided. This method is found to be of greater interest and value than the systematic courses which formerly obtained. These Lectures are not designed to cover the whole ground of Medicine and Surgery or to replace the Text-Books, but an attempt is made to enunciate principles and to explain difficulties. The Course extends over a period of two Winter Sessions.

Clinical lectures on Medicine and Surgery are given once a week throughout the Academic year, by the staff to the Hospital.

Clinical Medical and Surgical Units have recently been established. These are under the direction of Professor H. MacLean and Sir Cuthbert Wallace respectively, and offer special opportunities for clinical work, as well as for Pathological and Chemical investigation of disease and for research.

Tutorial Classes in Medicine, Surgery and Clinical Pathology are held prior to the January, April, and July Examinations of the "Conjoint Board."

PRACTICAL SURGERY.

Classes on Practical Surgery are held three times yearly, and a course of Instruction on the Diagnosis and Treatment of Fractures and Dislocations is held in the second half of each Winter Session.

OPERATIVE SURGERY.

A course of Demonstrations in operative surgery is given three times a year.

Special classes in Advanced Operative Surgery commence in October, and in April, for students preparing for the higher examinations.

ORTHOPÆDIC DEPARTMENT.

The recently formed Orthopædic Department, of which the Director is Sir Robert Jones, is in close connection with the Massage, Electro-Therapeutic and Physical Exercise Departments. New Wards are about to be opened for the reception of Orthopædic patients. The In-patients and Out-patients are under the care of Mr. W. Rowley Bristow, Orthopædic Surgeon to the Hospital. Instruction is given in the Out-Patient Department on Tuesday at 1.30 p.m. and Friday at 10.30 a.m. and in the Wards on Friday at 9.30 a.m. Operations are performed on Monday at 2 p.m.

PATHOLOGY AND BACTERIOLOGY.

Lecturers & Demonstrators.

Lecturer on Special Pathology—
Prof. L. S. Dudgeon, C.M.G., C.B.E., F.R.C.P.
Demonstrator—
A. L. Urquhart, O.B.E., M.B., Ch.B. Edin., D.P.H. Lond.
Lecturers on General Pathology and Bacteriology—
Prof. S. G. Shattock, F.R.C.S., F.R.S. and
Prof. L. S. Dudgeon, C.M.G., C.B.E., F.R.C.P.
Demonstrators—
J. F. Taylor, B.A., M.D., B.Ch. Cantab.
J. Bamforth, M D., C.H.B., D.P.H. Liverp.
Lecturer on Chemical Pathology—
O. L. V. S. de Wesselow, B.A., M.B., B.Ch. Oxon.
Lecturer on Clinical Pathology—
A. L. Urquhart, O.B.E., M.B. Ch.B. Edin., D.P.H. Lond.
Post Mortem Examinations—
Demonstrators—
A. L. Urquhart, O.B.E., M.B. Edin., D.P.H. Lond.; J. L. Birley, C.B.E., M.A., M.D., B.Ch. Oxon.: H. L. Tidy, M.A., M.D., B.Ch. Oxon.: and the Medical Registrar.

THE PATHOLOGICAL LABORATORIES.

These Laboratories are under the supervision of the Director of Pathology—Professor L. S. Dudgeon.

1. **The Pathological Laboratory** for the study of Special Pathology occupies the west wing of the Medical School Buildings.

2. **The Louis Jenner Laboratory for Clinical Pathology,** which was founded in 1897, is named after its first Superintendent, the late Dr. Louis Jenner.

3. **The Bacteriological Laboratories,** which are an extension of the Louis Jenner Laboratory. Out-patients attend here for vaccine treatment.

4. **Laboratory of Chemical Pathology,** is situated in the same block as the Louis Jenner and Bacteriological Laboratories on the East Face of the Hospital.

The Post Mortem Room and Mortuary are provided with a Refrigerating Apparatus and are ventilated by the electric fan.

The Museums, Curator, Professor S. G. Shattock, F.R.C.S., F.R.S.

(See page 17.)

The following appointments are open to students :—

1. Clerkships in Morbid Histology in the Pathological Laboratories for 3 or 6 months.
2. Clerkships in the Post Mortem Room.
3. Clerkships for senior students in Clinical Pathology, Bacteriology and Vaccine Therapy.

LECTURES, CLASSES, ETC.

Students commence their "final studies" with a course in Elementary Pathology, Bacteriology and Chemical Pathology. They receive practical instruction in various laboratory methods such as are employed for the examination of patients in the Wards and Out-patient Departments, and in Elementary General and Special Pathology.

This course is held in conjunction with Pharmacology and Elementary Surgery and Medicine. All students are strongly advised to take this course before they commence the Ward-work.

A special Practical Class in Pathology and Bacteriology is held twice a year, and is for the benefit of all students.

Practical instruction is given in the Pathological Laboratories to those students who act as clerks for a period of three or six months. Here they are able to make the various bacteriological examinations for in-patients and out-patients under the direct supervision of the teachers of pathology.

Patients attend mornings and afternoons for vaccine treatment.

Instruction in Morbid Anatomy is given in the Post Mortem Room in the afternoons and Saturday morning, by the Demonstrators.

Lectures. Special Pathology. Professor Dudgeon gives one lecture each week throughout the year in Morbid Anatomy which is followed by a microscopical demonstration on the subject-matter of the lecture.

General Pathology & Bacteriology.—Professor Shattock gives one lecture each week in General Pathology throughout the Winter Session and a demonstration on the following day.

Professor Dudgeon gives one lecture a week during the same period which is followed by a practical demonstration.

Chemical Pathology. Dr. de Wesselow gives one lecture a week in the Winter Session (Oct.—Dec.)

Tutorial Classes. These classes are held before each examination by Professor Shattock and Drs. Urquhart, Taylor and Bamforth.

Special Lectures are given in conjunction with the lectures on Medicine, Surgery, Obstetrics and Gynæcology by Professors Shattock and Dudgeon.

FORENSIC MEDICINE AND TOXICOLOGY.

DR. EDWIN SMITH

and the Demonstrator of Toxicology.

A three months' course of lectures is given during the Summer Session by Dr. Edwin Smith.

The lectures cover the synopsis of the various Examining Boards, and are supplemented in the toxicological section by practical demonstrations by Mr. C. C. Wood.

MENTAL DISEASES.

DR. W. H. B. STODDART.

A three months' course of lectures on Mental Disease and Lunacy Law is given during the Summer Session. The Syllabus includes:—Elementary Psychology, normal and morbid. The Anxiety Neurosis. Neurasthenia. Hysteria. The Obsessional Neuroses. Maniacal Depressive Insanity. Paranoia. Dementia Praecox. Paraphrenia. Confusional Insanity. Organic Insanities. General Paralysis. Senile Dementias. Mental Deficiency (Idiocy and Imbecility). The Legal Relations of Insanity.

Clinical Instruction is given by visits to Bethlem Royal Hospital, or other asylums, on Saturdays at 10.30 a.m. during the Summer Session, and also by Dr. W. H. B. Stoddart in the Out-Patient department at St. Thomas's Hospital, on Tuesdays at 10 a.m. throughout the year.

DISEASES OF THE EYE.

MR. J. H. FISHER AND MR. A. C. HUDSON.

A course of lectures is given by Mr. Fisher during the first half of the Winter Session. Occasional demonstrations of cases are also arranged. Clinical lectures or demonstrations of cases are given during the Summer Session.

An elementary class for learning the use of the Ophthalmoscope is held, commencing on the third Tuesday, January, April, July and October.

A special class for Instruction in Refraction is attended by the dressers on their appointment.

Tutorial classes are held in connection with the Surgical tutorial classes for the examinations of the "Conjoint Board."

A Special Course of operations on the dead subject is given by Mr. Fisher if required.

DISEASES OF THE THROAT.

MR. W. G. HOWARTH.

A course of lectures on this subject is delivered during the second half of the Winter Session, and Clinical Lectures are given occasionally.

DISEASES OF THE EAR.

MR. H. J. MARRIAGE.

Clinical Instruction is given in the Out Patient Department on Monday and Thursday Afternoon at 2 p.m., and Clinical Lectures are given from time to time in the Clinical Lecture Theatre.

DISEASES OF THE SKIN.

DR. S. E. DORE.

A short course of Lectures and Clinical Demonstrations is given each Summer Session.

PUBLIC HEALTH.

DR. T. CARNWATH.

A course of lectures is given during the Summer Session, dealing with:—

Water, Air, Soil, Food, the Dwelling in relation to Health and Disease—Infectious and Epidemic Diseases, the principles of preventive measures—Quarantine, Port Sanitary Administration, Isolation Hospitals, temporary or permanent—Provisions of the Act for Notification of Diseases—The principles of Disinfection and the mode of action of the chief disinfecting agents—Vaccination—Statistics in relation to public health—Statutes relating to public health—The powers and duties of Sanitary Authorities and their officers—Water Supply, Drainage, Sewerage, the disposal of sewage and excreta by methods adapted to either town or country districts—Trades regulated under the Factory and Public Health Acts.

The lectures may be supplemented by Public Health demonstrations relating to water supply, systems of sewage disposal and purification, establishment and organization of Isolation Hospitals, house drainage, schools, workhouses and other institutions, Dairy Sanitation, etc. Contagious Diseases (Tuberculosis) Animals' Act.

St. Thomas's Hospital Medical School is one of the institutions recognised by the Universities of Oxford, Cambridge, and London, and the Royal Colleges of Physicians and Surgeons for Laboratory instruction in Public Health.

TUTORIAL CLASSES.

All students are specially prepared for examinations in the final subjects of Medicine, Surgery, and Midwifery, by a system of Tutorial Classes. These are held three times a year in each subject, and last for eight weeks before each examination. Each course consists of from twenty-five to fifty classes. The classes are mostly conducted by Members of the Hospital Staff, and their chief object is to prepare students for *vivâ voce* Examination.

HOSPITAL PRACTICE.

CLINICAL TEACHING OF MEDICINE AND SURGERY.

CLINICAL INSTRUCTION is given daily by the Physicians and Surgeons during their visits to the Wards, and by the Physicians and Surgeons in the Out-Patient Departments, as set out in the Time Table.

SPECIAL LECTURES.

Short Courses of Lectures on Advanced Medical Subjects are given throughout the year. Special Notices of these are posted on the Notice Boards.

CLINICAL LECTURES.

CLINICAL LECTURES are given on Wednesdays throughout the sessions each lecture being, so far as possible, illustrated by cases. They include a series of lectures or demonstrations given in connection with the Special Departments. The times and subjects of all Clinical Lectures are announced beforehand on the notice boards. To comply with the regulations of the Conjoint Examination Board these lectures must be attended during a period of nine months. Attendance at the lectures is registered.

CLINICAL APPOINTMENTS.

CLINICAL CLERKS and DRESSERS to In-patients are appointed every three months. The In-Patient Dressers go on Accident Duty in rotation. The DRESSER on Accident Duty is provided with a Room and Commons in the Hospital.

CLINICAL CLERKS and DRESSERS for the Out-patients are also appointed at the same intervals.

Applicants for Clinical Appointments are required to have passed the 2nd examination of the Conjoint Board, or an equivalent examination. All Clinical Clerks and Dressers must attend a course of instruction in Physical Diagnosis, Surgical Technique, Elementary Bacteriology, Biochemistry and Pathology and Pharmacology. Dressers must attend the Lectures on Anæsthetics and receive practical instruction in their administration. (*The Duties of all Clerks and Dressers commence on the second Tuesday in January, April, July, and October.*)

CLINICAL CLERKS TO THE ANÆSTHETISTS are appointed to hold office for three months. They must have attended the preliminary lectures on Anæsthetics and Anæsthetic Apparatus by Dr. Z. Mennell.

CLINICAL CLERKS IN THE GYNÆCOLOGICAL AND MATERNITY DEPARTMENTS are appointed every three months. For half this time they are attached to the Gynæcological Ward, and for the other half to the Maternity Ward and the Out-door Maternity District. They are also expected, whenever possible, to attend the Out-Patient Department for Diseases of Women.

The Clerks are appointed, in rotation, from a list of Students who have entered their names for the purpose, have attended Lectures on Midwifery and have held the offices of Clinical Clerk and Dresser. They must attend the classes in Elementary Practical Obstetrics. Certificates are awarded to those who have satisfactorily attended Sixty Maternity cases.

Appointments in the SPECIAL DEPARTMENTS of the Hospital must be held by all students who have finished their terms as In- and Out-patient Clerks and Dressers, otherwise they cannot be considered as attending Hospital Practice or receive the necessary signatures to that effect.

Clinical Clerks are also appointed to the Tuberculosis Department.

SPECIAL DEPARTMENTS.

Midwifery.—A Maternity Ward of 21 beds is available for teaching purposes. This enables University Students to comply with the new regulations of the Examining Bodies without going to a Special Hospital. All Students will receive one month's training in the Ward before attending confinements in the district. Clinical Instruction is given on Mondays at 1.30 p.m., Wednesdays at 10 a.m., and on Thursdays at 2 p.m.

A maternity department, under the supervision of the Obstetric Physician to out-patients, is connected with the hospital, women being attended in confinement at their own homes by students of the hospital.

Diseases of Women.—Clinical instruction is given in Adelaide Ward on Tuesdays and Fridays at 2 p.m., and in the Casualty and O. P. Department on Mondays and Wednesdays at 1.30 p.m. and on Fridays at 9.30 a.m.

Infant Welfare Clinics are also conducted under the supervision of the Physician in charge of the Department of Diseases of Children.

Medical Diseases of Children.—Clinical Instruction is given in the Out-Patient Rooms on Wednesdays and Saturdays at 10 a.m. and in Lilian Ward on Wednesdays at 3 p.m.

Neurological Out-Patients.—Neurological cases are demonstrated by Dr. Birley on Tuesdays at 10 a.m., and Wednesdays at 2 p.m.

Diseases of the Eye.—Patients are seen and Clinical Instruction afforded in the Out-Patient rooms daily at 2 p.m., except Saturday, and in the Ophthalmic Ward, on Monday and Thursday at 2 p.m. Clinical Lectures and Ophthalmoscopic Demonstrations are also given.

Diseases of the Skin.—Clinical instruction on Tuesdays at 2 p.m., Wednesdays at 10 a.m., and Fridays at 2 p.m. Wednesday mornings are devoted to children.

Diseases of the Throat.—Clinical instruction on Wednesdays at 2 p.m. and Fridays at 9.30 a.m. Operations Mondays and Fridays at 2 p.m.

Diseases of the Ear.—Clinical instruction on Mondays and Thursdays at 2 p.m. Operations Tuesdays and Fridays at 2 p.m.

Mental Diseases.—Clinical instruction on Tuesdays at 10 a.m., in the Out-Patient department, and also at 10.30 a.m. on Saturdays during the Summer Session at Bethlem Royal Hospital.

Diseases of the Teeth.—The Dental Surgeon gives instruction in Dental Surgery on Mondays and Thursdays at 9 a.m.

Vaccination is taught practically at the Hospital on Tuesdays at 10.30 a.m. by Dr. A. E. COPE, who is authorised by the Local Government Board to give certificates of proficiency. A special course of instruction is given in January, May and October.

X-Rays—Instruction is given on Mondays, Wednesdays & Fridays at 2 p.m.

Vaccine Treatment is administered in the Bateriological Laboratory from 10—1 daily, Saturdays excepted.

Cardiographic Department.—Patients are seen by Dr. Cassidy on Wednesdays at 10 a.m., and on Thursdays at 2 p.m.

Orthopædic Department.—Clinical Instruction is given on Tuesdays at 1.30 p.m. in the Out-Patient Room, Fridays at 9.30 a.m. in the Wards, and Operations are performed on Mondays at 2 p.m.

Tuberculosis Department.—Mondays, Women 10 a.m.; Tuesdays, Men 10 a.m., Women 4.30 p.m.; Wednesdays, Women 10 a.m.; Men 8 p.m.; Thursdays, Men 10 a.m.; Fridays, Men 10 a.m. and 3 p.m. (Surgical). Clinical instruction in the Ward every Thursday at 10 a.m.

Venereal Department.—See time-table on page 33.

For further appointments, open to Qualified Students, see page 38, 39.

DAYS AND HOURS OF LECTURES AND DEMONSTRATIONS.

FIRST YEAR.

WINTER SESSION.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
BIOLOGY. Mr. Rushton and Mr. Billinghurst	Lectures	—	9½–10½	—	9½–10½	10–11	—
	Practical Work.........	3–5	10½–1 3–5	—	10½–1	11–1	—
	Revision	—	—	11–12	—	—	—
CHEMISTRY. Prof. Plimmer Mr. Wood	Lectures	10–11	—	12–1	2—3	—	—
	Practical Work.........	11–1	—	—	3—5	—	10–1 Oct-Dec.
	Revision	At times to be arranged.					
PHYSICS. Mr. Brinkworth & Demonstrator.	Lectures	2–3	2–3	10–11 Oct-Dec.	—	2–3	—
	Practical Work	3–5	10½–1 3–5	—	—	3–5	—
	Revision	—	—	—	—	—	10½–11½

SUMMER SESSION.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
BIOLOGY. Mr. Rushton and Mr. Billinghurst	Lectures	—	9½–10½	—	9½–10½	10—11	—
	Practical Work ...	3—5	10½—1 3—5	—	10½—1	11—1	—
	Revision	—	—	—	11—1	—	—
CHEMISTRY. Prof. Plimmer and Mr. Wood	Lectures	10—11	—	—	2—3	—	—
	Practical Work ...	11—1	—	—	3—5	—	—
	Revision	At	times	to be	arranged.		—
PHYSICS. Mr. Brinkworth & Demonstrator	Lectures	—	2—3	10½–11½	—	2—3	—
	Practical Work ...	3—5	10½—1 3—5	—	—	3—5	—
	Revision	2—3	—	—	—	—	—

SECOND YEAR.

WINTER SESSION.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
ANATOMY. Prof. Parsons and Demonstrators	Lectures	9½–10½	9½–10½	9½–10½	9½–10½	9½–10½	—
	Dissections	9—5	9—5	9—5	9—5	9—5	9—1
PHYSIOLOGY. Prof. Mellanby, Mr. Huggett and Demonstrator	Lectures	10.45– 11.45	—	10.45– 11.45	—	10.45– 11.45	—
	Practical Work ...	—	—	11.45—1	—	11.45—1	—
ORGANIC & APPLIED CHEMISTRY. Prof. Plimmer and Mr. C. C. Wood	Lectures	—	2—3	—	—	—	—
	Practical Work ...	—	3—5	—	12—1*	3—5	—
		—	2—4*	—	—	2—4*	—

*For Conjoint Students and 2nd M.B. Lond., Pt. 1 July, from Jan.—March.

SUMMER SESSION.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
ANATOMY. Prof. Parsons and Demonstrators	Dissections	9—5	9—5	9—5	9—5	9—5	9—1
	Revision	2—3	2—3	2—3	2—3	2—3	—
PHYSIOLOGY. Prof. Mellanby, and Mr. Huggett	Lectures	—	10—11	10—11	10—11	—	—
	Practical Work ...	—	11—1	11—1	11—1	—	—
	Revision	3—4	—	3—4	—	3—4	—
MATERIA MEDICA and PRACTICAL PHARMACY Mr. Jennings.	Lectures	10—11	—	—	—	10—11	—
	Practical Work ...	11—12	—	—	—	11—12	—

THIRD YEAR.

WINTER SESSION.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
ANATOMY. Prof. Parsons. Mr. J. M. G. Swainson and Demonstrators.	Lectures	9½–10½	9½–10½	9½–10½	9½–10½	9½–10½	—
	Dissections	9—5	9—5	9—5	9—5	9—5	9—1
	Revision	2—3	2—3	2—3	2—3	2—3	—
	Special Classes in Embryology and Surface Healing. as announced.						
PHYSIOLOGY. Prof. Mellanby and Mr. Huggett.	Lectures	10.45–11.45	—	10.45–11.45	—	10.45–11.45	—
	Practical Work ...	—	10.45—1	—	10.45—1	—	—
	Revision	3—4	—	3—4	—	3—4	—
PHARMACOLOGY. Dr. Woolley.	Lectures (Oct.—Dec.)	12—1	—	—	—	12—1	—
	Demonstrations (Jan.—Mar.)	—	—	2—3	—	—	—
MAT. MED.— Mr. Jennings.	Revision (Jan.—Mar.)	—	—	4—5	—	—	—
For M.B. Lond. Students.							

SUMMER SESSION.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
ANATOMY. Prof. Parsons. Mr. J. M. G. Swainson & Demonstrators.	Dissections	9—5	9—5	9—5	9—5	9—5	9—1
	Revision	2—3	2—3	2—3	2—3	2—3	—
	Special Classes as above	—	—	—	—	—	—
PHYSIOLOGY. Prof. Mellanby and Mr. Huggett.	Lectures	—	10—11	10—11	10—11	—	—
	Practical Work ...	—	11—1	11—1	11—1	—	—
	Revision	3—4	—	3—4	—	3—4	—
PHARMACOLOGY. Dr. Woolley.	Lectures	12—1	—	—	—	12—1	—
	Demonstration ...	—	—	2—3	—	—	

FOURTH AND FIFTH YEARS.

WINTER SESSION.

	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
MEDICINE AND SURGERY.—Lectures	9	9	—	9	—	9
The Physicians and Surgeons.—Clinical Lectures	—	—	2	—	—	—
MIDWIFERY AND DIS. OF WOMEN.—The Obstetric Physicians ... ... Lectures. (Jan. — Mar.)	—	—	9	—	9	—
GENERAL PATHOLOGY Lecture. — Prof. Shattock	—	—	—	12.30	12	—
AND BACTERIOLOGY. Lecture. — Prof. Dudgeon	—	—	—	—	4.15	—
SPECIAL PATHOLOGY. —Prof. Dudgeon ... Lecture-Demonstration..	—	—	—	—	—	11.30
CHEMICAL PATHOLOGY. —Dr. De Wesselow (Oct.—Dec.) ...	—	5	—	—	—	—
PATHOLOGICAL DEMONSTRATIONS.—In the Post-Mortem Room...........................	2	2	2	2	2	10
PRACTICAL SURGERY. Mr. Page. (Jan.—March)	—	—	—	—	—	—
Treatment of Fractures.	—	—	—	9	—	—
APPLIED ANATOMY.—Dr. Box. (Oct.—Dec.)	—	—	4.30	—	—	—
SURGICAL ANATOMY.—Mr. Maybury	—	4.0	—	—	—	—
LARYNGOLOGY.—Mr. Howarth Lectures. (Jan.—Mar.)	5	—	—	—	—	—
OPHTHALMOLOGY. —Mr. Fisher ... Lectures. (Oct.—Dec.)	—	—	9	—	—	—
VENEREAL DISEASE. —Col. Harrison... Lecture	—	—	—	—	—	—
Clinical Demonstration	—	—	—	11.30	—	—

FOURTH AND FIFTH YEARS.

SUMMER SESSION.

	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
MEDICINE AND SURGERY.—The Physicians and Surgeons Clinical Lecture.	—	—	2	—	—	—
MIDWIFERY AND DIS. OF WOMEN. — The Obstetric Physicians ... ... Lectures.	—	9	9	9	9	—
SPECIAL PATHOLOGY AND BACTERIOLOGY. —Prof. Dudgeon	—	—	—	—	12	—
FORENSIC MEDICINE.—Dr. Edwin Smith...	4.30	—	4.30	4.30	—	—
TOXICOLOGY.—Mr. C. C. Wood	—	12	—	—	—	—
PUBLIC HEALTH.—Dr. Carnwath	—	—	—	—	4	—
MENTAL DISEASE.— Dr. W. H. B. Stoddart Lecture	—	—	—	12	—	—
Asylum Visit...	—	—	—	—	—	10.30
VENEREAL DISEASE. —Col. Harrison ... Clinical Demonstrations	—	—	—	11.30	—	—
Lecture	—	—	—	—	5.30	—
DERMATOLOGY.—Dr. Dore. Lecture......	—	—	—	—	—	—

MEDICAL AND SURGICAL OFFICERS.

DAYS AND TIMES OF ATTENDANCES.

NAME.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
Dr. Box	2 p.m., Wards	—	10 a.m., O.P.D. (Children)	2 p.m., Wards	—	—
Dr. Russell	2 p.m., Wards	—	—	2 p.m., Wards	—	—
Dr. Buzzard	—	2 p.m., Wards	—	—	2 p.m., Wards	—
Prof. MacLean ...	2 p.m., Lab.	10 a.m., Wards	10 a.m., Wards	2 p.m., Lab.	10 a.m. & 2 p.m. Wards	—
Sir Cuthbert Wallace	10 a.m., Wards	2 p.m., Wards and Operations	10 a.m. and 2 p.m., Operations	2 p.m., O.P.D.	10 a.m., Wards	10 a.m., Operations
Mr. Sargent	2 p.m., Wards	—	2 p.m., ,,	2 p.m., Wards and Operations	—	—
Mr. Nitch	2 p.m., Wards	2 p.m., Operations	2 p.m., ,,	2 p.m., Wards and Cystoscopies	—	—
Mr. Adams	2 p.m., Old Cases at Casualty	2 p.m., Wards	2 p.m., ,,	2 p.m., Operations	2 p.m., Wards	—
Dr. Cassidy	1.30 p.m., O.P.D.	—	10 a.m., Cardiograph Dept.	2 p.m., Cardiograph Dept.	—	—
Dr. Birley	—	10 a.m., Neurological, O.P.D.	1.30 p.m., Neurological, O.P.D.	1.30 p.m., O.P.D.	2 p.m., P.M. Room	—
Dr. Tidy	—	1.30 p.m., O.P.D.		2 p.m., P.M. Room	1.30 p.m., O.P.D.	—
Mr. Page	1.30 p.m., O.P.D.	2 p.m., Operations	10 a.m., Casualty	—	2 p.m., Block 8	—
Mr. Romanis ...	10 a.m., Casualty	—	1.30 p.m., O.P.D.	—	10 a.m., Casualty 2 p.m., Operations	—
Mr. Maybury ... (Surg. Unit)	2 p.m., Operations 10 a.m., Wards	—	—	10 a.m., Casualty 2 p.m., O.P.D.	10 a.m., Wards	—
Mr. Mitchiner ...	2 p.m., Operations	10 a.m., Casualty	—	—	1.30 p.m., O.P.D.	10 a.m., Casualty
Dr. Jones ... ... (Medical Unit)	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 1 p.m.
Dr. Aikman ,, ,,	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 1 p.m.
Dr. Dyke ,, ,,	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 1 p.m.

DAYS AND TIMES OF ATTENDANCES—*continued.*

NAME.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
Dr. Fairbairn ... (Mid. & Gyn. Dept.)	—	2 p.m., Wards	10 a.m. (Mary)	2 p.m., Operations	2 p.m., Wards	—
Dr. J. P. Hedley ... (Mid. & Gyn. Dept.)	—	—	9.30 a.m., Operations 2 p.m., O.P.D.	2 p.m., Wards	2 p.m., O.P.D.	9.30 a.m., Operations
Mr. Wyatt ... ... (Mid. & Gyn. Dept.)	1.30 p.m., Wards 2.30 p.m., O.P.D.	9.30 p.m., O.P.D.	—	—	9.30 a.m., O.P.D.	—
Dr. Jewesbury ... (Dis. of Children)	10 a.m., O.P.D.	—	1.30 p.m., Wards	10 a.m., O.P.D.	10 a.m., O.P.D.	10 a.m., O.P.D.
Dr. Dore ... ... (Dermatolog. Dept.)	—	2 p.m., O.P.D.	10 a.m., O.P.D. (Children)	—	2 p.m., O.P.D.	—
Dr. Stoddart ... (Mental Diseases)	—	10 a.m., O.P.D.	—	—	—	—
Mr. McKay ... ... (Dental Dept.)	9 a.m., O.P.D.	—	—	9 a.m., O.P.D.	—	—
Mr. Fisher ... ... (Ophthalmic Dept.)	2 p.m., Eye Dep.	—	Operations, 9 a.m. Oct. to Dec., 10 a.m.	2 p.m., Eye Dept.	—	—
Mr. Hudson ,,	—	2 p.m., Eye Dept.	2 p.m., Eye Dept.	—	2 p.m., Eye Dept.	—
Mr. Howarth ... (Throat & Nose Dis.)	2 p.m., Operations	—	1.30 p.m., O.P.D.	—	10 a.m., O.P.D. 2 p.m., Operations	—
Mr. Marriage ... (Ear Diseases)	1.30 p.m., O.P.D.	2 p.m., Operations	—	1.30 p.m., O.P.D.	2 p.m., Operations	—
Mr. Bristow ... ... (Orthopædic Dept.)	2 p.m., Operations	2 p.m., O.P.D.	—	—	9.30 a.m., Wards 10.30 a.m., O.P.D.	—
Col. Harrison ... (Venereal Dept.)	—	—	—	11.30 a.m.	5.30 p.m.	M.O. on duty 10 a.m. to 10 p.m.
Mr. T. Anwyl Davies (Venereal Dept.)	10 a.m. to 10 p.m.	—	10 a.m. to 1 p.m. 5 p.m. to 10 p.m.	10 a.m. to 1 p.m.	10 a.m. to 6 p.m.	
Mr. W. de M. Peyton (Venereal Dept.)	—	10 a.m. to 10 p.m.	10 a.m. to 1 p.m. 5 p.m. to 8 p.m.	10 a.m. to 1 p.m. 5 p.m. to 8 p.m.	10 a.m. to 1 p.m. & 5 p.m. to 8 p.m.	

DAYS AND TIMES OF ATTENDANCES—*continued.*

NAME.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
Dr. Hebert ... ... (Tuberculosis Dept.)	10 a.m., O.P.D. (W)	10 a.m., O.P.D. (M) 4.30 p.m., O.P.D. (W)	10 a.m., O.P.D. (W) 8 p.m., O.P.D. (M)	10 a.m. Wards (M) and O.P.D. 3 p.m., O.P. Surg. (M)	10 a.m., O.P.D. (W) 3 p.m., O.P. Surg.	—
Sir Archibald Reid (X-Ray Dept.)	2 p.m.	—	2 p.m.	—	2 p.m.	—
Dr. Gouldesbrough „ „	2 p.m.	2 p.m.	2 p.m.	2 p.m.	2 p.m.	—
Dr. Fildes „ „	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 1 p.m.
Prof. Dudgeon ... (Pathological Dept.)	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m.
Dr. Urquhart „ „	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m.
Dr. Taylor „ „	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m.
Dr. Bamforth „ „	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m.
Dr. de Wesselow .. (Chem. Path.)	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m. to 5 p.m.	10 a.m.
Dr. Z. Mennell ... (Anæsthetics)	—	2 p.m.	2 p.m.	2 p.m.	—	—
Dr. E. W. Hedley ... „	—	2 p.m.	2 p.m.	3 p.m.	—	—
Dr. Dunkley „	2 p.m.	—	2 p.m.	2 p.m.	2 p.m.	—
Dr. Wilson „	—	3 p.m.	2 p.m.	9 a.m., Dental	—	—
Dr. Shelley „	9 a.m., Dental 2 p.m.	2 p.m.	—	2 p.m.	2 p.m.	—
Dr. J. B. Mennell ... (Surgical Massage)	10 a.m.	4 p.m.	10 a.m.	4 p.m.	10 a.m.	—
Mr. Timberg ... (Swedish Exer. Dept.)	2 p.m.	—	2 p.m.	—	2 p.m.	—
Mr. Murray Levick (Electro-Therap. Dpt.)	—	2 p.m.	—	—	2 p.m.	—
Dr. Cope ... ... (Vaccination)	—	10.30 a.m.	—	—	—	—

SCHOLARSHIPS, MEDALS, AND OTHER PRIZES.

The following Scholarships, Medals, and Prizes are open to Students of the Hospital.

ENTRANCE SCHOLARSHIPS.

Two Open Scholarships in Arts, equivalent to twelve months' Tuition Fees for the First Medical Examination.

Two Open Scholarships in Natural Science of the value of £150 and £60 respectively. These Scholarships must be taken out in Tuition Fees.

The University Scholarship of £100 in Anatomy, Physiology and Chemistry (any two). *(See also page 36).*

At the end of the Second Summer:—

The William Tite Scholarship of £25.

At the end of the Third Winter:—

The Musgrove Scholarship or the Peacock Scholarship (alternately) of £35.

At the end of the Fourth Winter:—

Second Tenure of the Musgrove or the Peacock Scholarship.

At the Examination of the Fifth Winter:—

The Hadden Prize for Pathology.

At the end of the Sixth Winter:—

The Mead Medal in Medicine, Pathology and Hygiene.
The Wainwright Prize in Medicine, Pathology and Hygiene
The Toller Prize in Medicine, Pathology and Hygiene.
The Cheselden Medal in Surgery and Surgical Anatomy.

Prizes which must be competed for before the end of the Seventh Year:—

The Bristowe Medal for Pathology.

The Beaney Scholarship of £50 in Surgery and Surgical Pathology (biennial prize).

The Solly Medal and Prize for Reports of Surgical Cases (biennial prize).

The Sutton Sams Prize for Reports of Cases in Obstetric Medicine (biennial prize).

The Clutton Memorial Medal for Clinical Surgery (awarded biennially and alternately with the Beaney Scholarship).

A Prize of Thirty Guineas known as the Granger Testimonial Prize is awarded annually for work in Anatomy or Physiology.

Research Scholarships for Qualified Students:—

The Louis Jenner Research Scholarship of £60 in Pathology (tenable for two years).

DETAILS OF THE SCHOLARSHIPS, MEDALS AND PRIZES.

ENTRANCE SCHOLARSHIPS.

OPEN SCHOLARSHIPS IN ARTS.

Two Scholarships, each equivalent to the Tuition Fee for the First Year of Study, are offered for competition each year in the third week of July.

These Scholarships are open to any Student who has passed a recognised Preliminary Examination and who is under 20 years of age. Successful competitors must enter at once as Students of the Hospital. The subjects are English, Arithmetic, Algebra and Geometry, together with any three of of the following: French, German, Latin, Greek, Chemistry, and Physics. The Examination is conducted by papers.

The standard is that of the Matriculation Examination of the University of London.

Candidates are required to send in their names and evidence of their eligibility, to the Medical Secretary, not later than July 1st.

OPEN SCHOLARSHIPS IN NATURAL SCIENCE.

Two Scholarships, of the value of £150 and £60 respectively, are offered for competition annually, after an examination in Physics, Chemistry, and Biology.

These Scholarships are open to all Students not exceeding 24 years of age who have passed a recognised Preliminary Examination in Arts, and have not received instruction in Anatomy or Physiology, without any condition as to their becoming Students of the Hospital, except in the case of successful Candidates, who must enter at once for the remainder of the curriculum and take out the Scholarship in Tuition Fees. The Examination will be conducted by means of written papers and practical work. The standard will be that of the First Examination for Medical Degrees of the University of London. Competitors are required to send in their names and Certificate of Birth and of Preliminary Examination to the Medical Secretary not later than July 1st; the Examination is held in the latter part of that month.

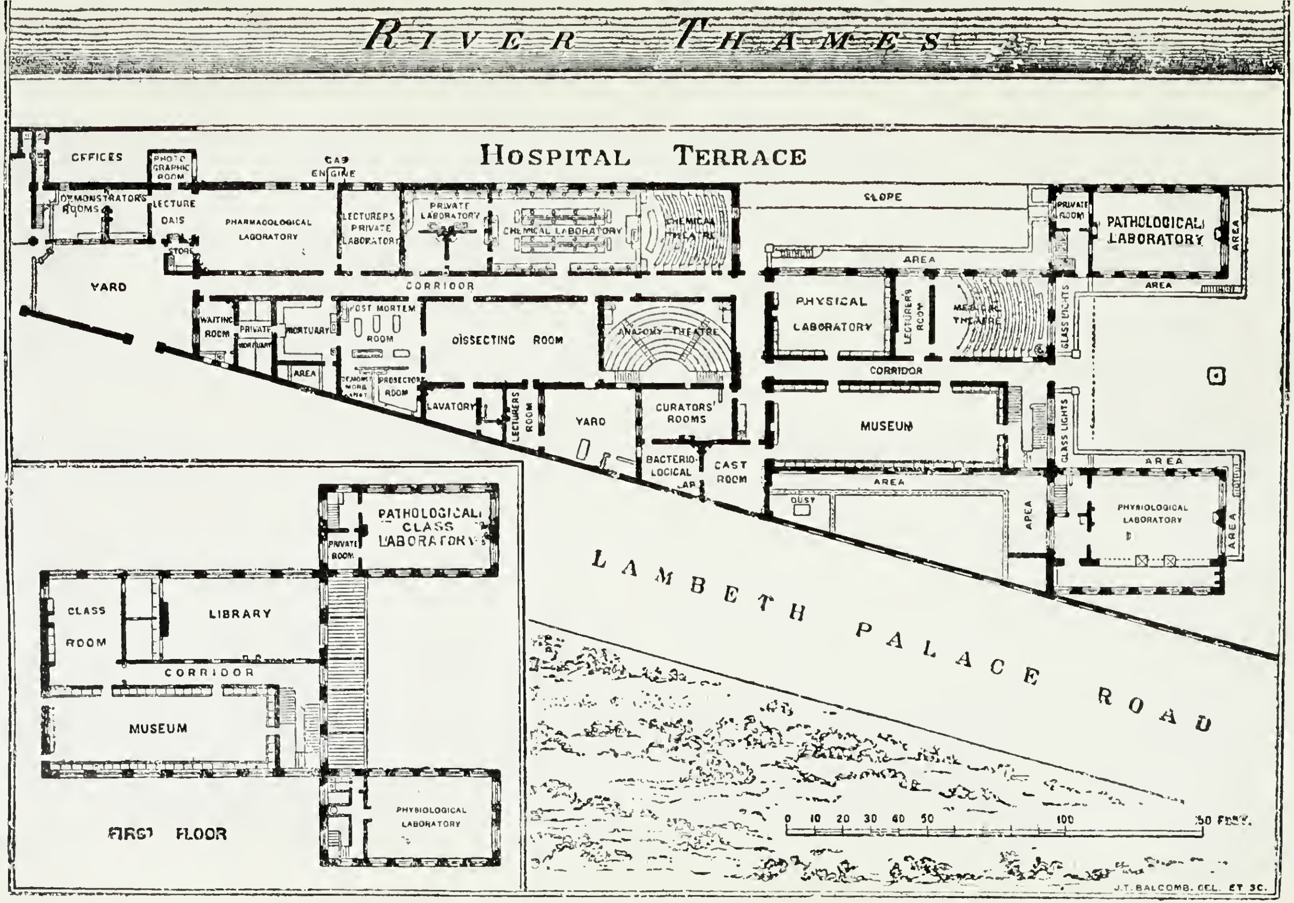
UNIVERSITY SCHOLARSHIP.

A Scholarship of the value of £100 will be offered for competition in *any two* of the following subjects: Anatomy; Physiology: Chemistry in its relations to Medicine and Physiology. It is open to Students who have completed their examinations in Anatomy and Physiology, for a Medical Degree in any of the Universities of the United Kingdom or the Colonies, and who have not joined any London Medical School before the commencement of the Summer term of the year in which the Examination is held. Candidates may specialise in one of the two subjects taken, or treat each subject as of equal value. In the former case two-thirds of the total marks obtainable in the examination will be allotted to the subject of choice. But, to be eligible for the Scholarship, a competitor must gain at least one-third of the marks allotted to the subsidiary subject. The successful Competitor must take out the Scholarship in Tuition Fees at St. Thomas's Hospital.

Candidate are required to send in their names and subjects proposed not later than July 31st.

The Examination is held in the latter part of September.

The William Tite Scholarship, founded by the late Sir W. Tite, C.B., M.P., F.R.S., of the value of about £25 is awarded each year to the Student placed highest in the 1st Class List in the examinations at the end of the second Summer Session. Preference, in case of equality between Students, is to be given to the son of a medical man, and more particularly of one who has been educated at St. Thomas's Hospital or is in Practice in Bath.


RIVER THAMES
HOSPITAL TERRACE
OFFICES
PHOTOGRAPHIC ROOM
GAS ENGINE
DEMONSTRATORS' ROOMS
LECTURE DAIS
STORE
PHARMACOLOGICAL LABORATORY
LECTURER'S PRIVATE LABORATORY
PRIVATE LABORATORY
CHEMICAL LABORATORY
CHEMICAL THEATRE
SLOPE
AREA
PRIVATE ROOM
PATHOLOGICAL LABORATORY
AREA
YARD
CORRIDOR
WAITING ROOM
PRIVATE MORTUARY
MORTUARY
AREA
POST MORTEM ROOM
DEMONST. WORK ROOM
PROSECTOR'S ROOM
DISSECTING ROOM
ANATOMY THEATRE
LAVATORY
LECTURERS ROOM
YARD
CURATORS' ROOMS
BACTERIOLOGICAL LAB
CAST ROOM
PHYSICAL LABORATORY
LECTURER'S ROOM
MEDICAL THEATRE
GLASS LIGHTS
CORRIDOR
MUSEUM
GLASS LIGHTS
AREA
AREA
DUST
APEA
PHYSIOLOGICAL LABORATORY
AREA
LAMBETH PALACE ROAD
0 10 20 30 40 50 100 150 FEET
PATHOLOGICAL CLASS LABORATORY
PRIVATE ROOM
CLASS ROOM
LIBRARY
CORRIDOR
MUSEUM
PHYSIOLOGICAL LABORATORY
FIRST FLOOR
J.T. BALCOMB. DEL. ET SC.

GROUND PLAN

The MUSGROVE Scholarship, founded by Sir JOHN MUSGROVE, Bart., the late President of the Hospital, of the value of about £35 is awarded biennially to the Student who shall take the highest place in the 1st Class List in the examinations at the end of the third Winter Session. It is tenable for two years, provided the holder has worked during his fourth year to the satisfaction of the School Council.

The PEACOCK Scholarship, founded by the will of the late Dr. THOMAS BEVILL PEACOCK, for many years Physician, and at the time of his death Consulting Physician to St. Thomas's Hospital, is of the same value as the Musgrove Scholarship ; is awarded and held upon the same terms ; and is given every other year in alternation with that Scholarship.

The HADDEN PRIZE (in memory of the late W. B. HADDEN, Assistant Physician, 1885—1893), is awarded at the Examination at the end of the fifth Winter as the prize for Pathology.

The MEAD MEDAL, founded by Mr. and Mrs. NEWMAN SMITH (in honour of Richard Mead, Physician 1703—1714) is awarded annually to a Sixth Year's Student,* in respect of a Special Practical Examination in Medicine, Pathology and Hygiene. The marks are allotted as follows : Medical Commentaries, 240 ; Viva Voce on Medical Cases, 100 ; Paper on Pathology, including one question on Public Health, 100 ; Viva Voce on Pathology, Histology and Morbid Anatomy, 100 ; Ophthalmic Cases, 20 ; Throat Cases, 20 ; Skin Cases, 20. Total 600.

The WAINWRIGHT PRIZE, £10, founded by Sir J. G. WAINWRIGHT, formerly Treasurer of the Hospital, is awarded annually to a Student from Oxford or Cambridge University under conditions similar to those for the Mead Medal.

The SEYMOUR GRAVES TOLLER PRIZE, founded by Dr. E. TOLLER (in memory of his son, S. G. Toller, elected Assistant Physician, 1897), is awarded annually to the most distinguished competitor at the Examination for the Mead Medal and Wainwright Prize.

The CHESELDEN MEDAL, founded by the late GEORGE VAUGHAN, Esq. (in honour of William Cheselden, elected Assistant Surgeon, 1719), is annually awarded to the Sixth Year's Student* who most distinguishes himself in respect of a Special Practical Examination in Surgery and Surgical Anatomy. The marks are allotted as follows : Surgical Commentaries, 100 ; Surgical Cases, 100 ; Dissections, 100 ; Surgical Operations, 100 ; Viva Voce in Surgical Appliances and Morbid Specimens, 100 ; Viva Voce on Anatomy, 100. Total 600.

The BRISTOWE MEDAL (in memory of the late Dr. J. S. BRISTOWE, F.R.S., Assistant Physician and Physician 1854—1892), is awarded annually in respect of a special Practical Examination in Pathology and Morbid Anatomy. The examination is held in the first half of the Winter session. Students are eligible who have completed the Fifth but not the Seventh year of Medical Study. At least three years of this time must have been passed at St. Thomas's Hospital.

The CLUTTON MEMORIAL MEDAL (founded in Memory of the late Mr. H. H. CLUTTON, Assistant Surgeon and Surgeon to the Hospital, 1879-1909), is awarded biennially and alternately with the Beaney Scholarship, in respect of a Special Examination in Clinical Surgery. It is open to Students, whether qualified or not, within three years of holding their first hospital appointment as Clerk or Dresser.

The BEANEY SCHOLARSHIP, founded by the will of the late Dr. BEANEY, of the value of £50, is awarded biennially, after an examination in Surgery and Surgical Pathology, to a student who shall have completed his fifth but not his seventh year. The examination is held during the Summer Session

---

* A Sixth Year's Student is a Student of the Hospital who has just completed 3 winters Clinical work, irrespective of the institution at which the Clinical Appointments were commenced.

The SOLLY MEDAL (in memory of the late Samuel Solly, elected Assistant Surgeon, 1841), together with a Prize in Money, is awarded biennially. Those Students are eligible to compete who are of from four to seven years' standing. The award is made for the best series of Reports of Surgical cases coming under the Student's personal observation in the Wards, not, however, to exceed ten in number. Reports must be sent in not later than March 21st.

The SUTTON SAMS MEMORIAL PRIZE, is awarded biennially for the best series of Reports of Cases in Obstetric Medicine, including Midwifery and the Diseases of Women. Reports must be sent in not later than June 30th.

The GRAINGER TESTIMONIAL PRIZE.—The holder of this prize has to prepare, under the direction of the Lecturers on Anatomy and Physiology, a series of specimens illustrative of recent Anatomical or Physiological research, and at the end of a year receives, if his work has proved satisfactory, an honorarium of thirty guineas. The appointment is annual and is in the hands of the School Council.

The LOUIS JENNER RESEARCH SCHOLARSHIP was founded by the DOWAGER LADY JENNER in memory of her son, Dr. Louis Leopold Jenner. It is of the annual value of £60 and is instituted for the encouragement of original research into the cause, nature and process of disease. The Scholarship is tenable for one year with the possibility of extension of tenure for a second year subject to approval of the Medical and Surgical Officers and Lecturers. The Scholar must be qualified and a Student of the Hospital. The tenure of the Scholarship dates from May 1st of each year and the investigation must be carried on in or in connection with the Louis Jenner Laboratory of Clinical Pathology.

The JOHN AND TEMPLE RESEARCH FELLOWSHIP.

APPOINTMENTS.

(All these Appointments are open to Students without extra payment.)

A RESIDENT ASSISTANT PHYSICIAN and a RESIDENT ASSISTANT SURGEON, at a salary of £200 per annum each, are from time to time appointed. The appointments are annual, but the tenure of office may be renewed for a term not exceeding one year.

TWO HOSPITAL REGISTRARS (Medical and Surgical), at an annual Salary of £200 and £50 on completion of their Annual Report, are appointed in each year. They are eligible for annual re-appointment, but may not hold office for more than two years. Preference will be given to Students of the Hospital who have specially distinguished themselves and have completed their studies in the School.

AN OBSTETRIC TUTOR AND REGISTRAR is appointed each year, at an annual salary of £50. He is eligible for annual re-appointment, but may not hold office for more than three years consecutively. The holder of the office takes part in the tutorial instruction of students, under the direction of the Obstetric Physicians.

AN OPHTHALMIC REGISTRAR who acts as a Senior Assistant in the Department and is paid at the same rate as the Obstetric Registrar.

AN ORTHOPÆDIC REGISTRAR (unpaid) is appointed each year. He is eligible for annual re-appointment.

ONE SENIOR RESIDENT ANÆSTHETIST at a salary of £200.

TWO SENIOR RESIDENT CASUALTY OFFICERS at a Salary of £100.

SENIOR ASSISTANT BACTERIOLOGIST at a salary of £400.

JUNIOR ASSISTANT BACTERIOLOGIST at a salary of £250.

ASSISTANT PATHOLOGIST at a salary of £250.

House Appointments, open to Students who have obtained their diplomas.

Four RESIDENT HOUSE PHYSICIANS, Four RESIDENT HOUSE SURGEONS and Eight RESIDENT CASUALTY OFFICERS and ANÆSTHETISTS are selected every three months. All these Officers are provided with Rooms and Commons by the Hospital, free of expense, and hold office for six months, if recommended for re-election.

A SENIOR and a JUNIOR OBSTETRIC HOUSE PHYSICIAN are selected every three months, and a HOUSE PHYSICIAN to the Department of Children's Diseases every six months. All are provided with Rooms and Commons in the Hospital, free of expense.

A SENIOR and a JUNIOR OPHTHALMIC HOUSE SURGEON, and a SENIOR and JUNIOR HOUSE SURGEON to the Ear, Nose and Throat Departments are appointed every three months; the Senior is provided with Rooms and Commons in the Hospital, free of expense.

An ORTHOPÆDIC HOUSE SURGEON is appointed every six months. He is provided with Rooms and Commons in the Hospital free of expense.

CLINICAL ASSISTANTS in the Departments for Medical Diseases of Children, for diseases of the Throat, Skin, Ear, and in the Mental, Orthopædic, Neurological, Venereal, Electrical, X Ray, Electro-Cardiographic and Physical Exercise Departments, are appointed every three months.

Appointments for Students before Qualification.

CLINICAL CLERKS and DRESSERS to In-patients are selected to the number of at least 100 each year, from amongst the most eligible pupils. The DRESSER on Accident Duty is provided with a Room and Commons in the Hospital. CLINICAL CLERKS and DRESSERS for the Out-patients are also appointed, to the number of at least 80 to 100 each year; applicants for Clerkships or Dresserships are required to have passed the 2nd examination of the Conjoint Board, or an equivalent examination.

CLINICAL CLERKS must attend a course of instruction in Elementary Clinical Medicine. *(The Duties commence on the second Tuesday in January, April, July and October.)* CLINICAL CLERKS TO THE ANÆSTHETISTS are also appointed to hold office for three months.

DRESSERS must attend the Lectures on Practical Surgery and also (during their first three months) the Special Classes held by the Surgical Registrar, and the Lectures on Anæsthetics, with instruction in their administration.

CLINICAL CLERKS and DRESSERS to the various SPECIAL DEPARTMENTS are elected from amongst those Students who have finished their terms as Clerks and Dressers in the Wards and Out-patient Departments.

GYNÆCOLOGICAL and OBSTETRIC CLERKS are appointed, in rotation, from a list of Students who have entered their names for the purpose. They must have attended Lectures on Midwifery and a course of Elementary Practical Obstetrics, have passed the "Second Conjoint," or an equivalent Examination, and have held the offices of Clinical Clerk and Dresser. Each Clerk holds office for three months, and Special Certificates are awarded to those Gentlemen who have satisfactorily attended Sixty Maternity cases.

Students are appointed to act as ASSISTANTS in the CLINICAL LABORATORY, the PATHOLOGICAL LABORATORY and the POST-MORTEM ROOM.

ASSISTANTS TO THE TEACHERS OF PRACTICAL AND MANIPULATIVE SURGERY are appointed for the Winter Session.

ASSISTANTS IN THE CHEMICAL DEPARTMENT are selected from those who have passed the FIRST EXAMINATION FOR MEDICAL DEGREES, UNIV. LOND., or who are similarly qualified.

ASSISTANTS IN THE PHYSIOLOGICAL LABORATORY are selected from Students who have completed their Second Winter Session.

ANATOMICAL REGISTRARS and PROSECTORS are appointed in the early part of the Winter Session, also ASSISTANTS TO THE LECTURER ON ELEMENTARY BIOLOGY.

REGULATIONS FOR THE EXAMINATION AND CLASSIFICATION OF THE STUDENTS AT THE MEDICAL SCHOOL.

1. In accordance with the Regulations of the Qualifying Bodies, Students must attend the Class Examinations in the subjects for which they have to be certified, and show by their answers to the questions that they have paid proper attention to the Lectures, otherwise the signature to their Schedules may be withheld.

2. There shall be held at least two Examinations in the 2nd and 3rd Winter and one in the 2nd Summer Session in each subject on which attendance is required during that Session, and the marks obtained in these Examinations shall be the basis for the Classification of Students and the Award of Prizes for each Session respectively. Provided that any extra Examination in the course of the Session, in any subject, be not allowed to interfere with the ordinary Lectures in other subjects.

3. The number of marks allotted to each subject in the following Schedule is not to be exceeded in case the number of Examinations held during the Session be more than two, but must be distributed amongst the several Examinations.

4. Students must obtain at least one-third of the total number of marks in each subject, and not less than two-thirds of the total number allotted to all the subjects collectively, to be placed in the 1st Class.

Those who have obtained one-third of the total number of marks allotted to all the subjects collectively are placed in the 2nd Class.

The names of those who do not obtain either a 1st or 2nd Class position are not published, but a General List showing the exact position of each Student at every Examination is kept by the Secretary, from whom any Student can learn his own position, but no Lecturer shall make known to Students the number of marks obtained by any Student in any subject.

5. The Prizes shall be awarded to the Students holding the 1st and 2nd positions in the 1st Class of each Winter Session, and to those holding the 1st and 2nd positions of the 1st Class in the second Summer Session.

6. The Authorities reserve the right of withholding any prize, if no competitor of sufficient merit presents himself.

2nd YEAR'S SUBJECTS.

WINTER ...	Anatomy	Viva. (Dec.)	50
	Physiology.	Viva. (Dec.)	50
SUMMER ...	Anatomy	Paper	100
	Physiology	Paper	100
	Anatomy	Viva.	100
	Physiology	Viva.	100
	Pharmacy	... ...	100
			600

3rd YEAR'S SUBJECTS.

WINTER ...	Anatomy.	Paper (March)	100
		Viva. (Dec.	50
		Viva. (March)	50
	Physiology.	Paper (March)	100
		Viva. (Dec.)	50
		Viva. (March)	50
			400

REGULATIONS REGARDING FEES.

1. The Annual Fee for each year is £50 0 0

2. The Annual Fee does not include the following, for which the Fees are as stated :—
    a. Instruction in Vaccination (by a Public Vaccinator) ... £1 11 6
    b. Instruction in Pharmacy (by the Hospital Pharmacist) £3 3 0
    c. Instruction in Infectious Fevers (at a recognised Fever Hospital) £3 3 0

3. The Annual Fee is due when a student joins the School and at the beginning of each subsequent year.

4. All fees are to be paid in advance (i.e. at the beginning of the Session on account of which they are due) at the Cashier's Office and are not returnable. Drafts should be drawn in favour of "The Cashier of the Medical School, St. Thomas's Hospital" and crossed "London County Westminster & Parrs Bank Ltd."

5. The course of study pursued by a student paying annual fees must be continuous, unless the School Authorities, on the ground of illness or other adequate reason, may otherwise determine.

6. A student who obtains a registrable qualification, within 3 months of the date on which his last Annual Fee became due may, at the discretion of the School Authorities, be allowed a rebate of 20 guineas, and if within six months, a rebate of 10 guineas, provided that three Annual Fees for Clinical Instruction have been paid, and that further instruction is not desired.

7. The payment of the Annual Fee entitles a Student, during the twelve months following the date on which each annual fee becomes due, to attend the full practice of the Hospital, all lectures, demonstrations and other instruction provided by the School for students of his standing (with the exception of such courses as may from time to time be specially excluded) ; to compete for prizes, and, if selected, to hold appointments in the Hospital.

The regular course includes the Special Classes to prepare Students for the Second Examination for Medical Degrees, Univ. Lond., and Primary F.R.C.S. Examinations, provided that these Examinations are taken before qualification.

No charges are now made for materials and apparatus, but Students must pay for the "parts" they dissect at rates which may be ascertained in the Library.

Students must provide themselves with Microscopes and Dissecting instruments.

II. FEES FOR COURSES NOT INCLUDED IN THE ANNUAL FEE.

Primary F.R.C.S. (for Candidates who are qualified from St. Thomas's Hospital)	15 guineas.
Primary F.R.C.S. External Students	20 guineas.
Final F.R.C.S. (including Operative Surgery):	
St. Thomas's Students	15 guineas.
External Students	25 guineas.
Operative Surgery:	
St. Thomas's Students	7 guineas.
External Students	10 guineas.

III. HOSPITAL PRACTICE.

(For other than those who enter for the full Curriculum.)

The following are the fees payable by those who desire to attend the Practice of the Hospital for limited periods, including Lectures and Post-mortem Inspections. The payment of these fees renders the Student eligible for Hospital appointments :—

For three months' Hospital Practice	15 guineas.
Six months' ,, ,,	25 guineas.
One year ,, ,,	50 guineas.

IV. LECTURES, DEMONSTRATIONS AND CLASSES.

Single Courses of Lectures, Demonstrations and Classes in any of the Subjects taught in the school may be attended on payment of fees that may be ascertained on enquiry at the Medical Secretary's Office.

The full Fees payable to the School for the time in which a qualification* should be taken are :—

	£	s.	d.
Annual Fee for five years (£50 for each year)	250	0	0
Vaccination, Pharmacy and Fevers	7	17	6
Entrance Fee and	257	17	6
5 years' subscription to Amalgamated Clubs	23	2	0
	£280	19	6

For University Students (entering for Clinical work) :—

	£	s.	d.
Annual Fees for 4th and 5th years (£50 each year)	100	0	0
Vaccination, Pharmacy and Fevers	7	17	6
Entrance Fee and	107	17	6
2 years' subscription to Amalgamated Clubs	10	10	0
	£118	7	6

---

* For the M.B., B.S. of the University of London, a course of study of five-and-a-half years duration is required.

AMALGAMATED CLUBS.

The Social Club is housed in premises adjoining the Medical School, and under the control of a combined Committee of Staff and Students.

The Amalgamated Clubs comprise the Students' Club, the Medical and Physical Society, the St. Thomas's Hospital Gazette, and the following Clubs:—Athletic, Cricket, Football (Rugby and Association), Lawn Tennis, Hockey, Rifle, Boxing, and Swimming.

The Entrance Fee to the Amalgamated Clubs is £2 2s., and the Annual Subscription, £4 4s. which must be renewed each year on the date of entry. After the payment of the Entrance Fee and five consecutive subscriptions the Student on payment of one guinea becomes a Life Member, provided he has obtained a registrable qualification.

CLUB GROUND.

The Council of the Amalgamated Clubs are in possession of a Cricket, Football, and Lawn Tennis Ground, of more than nine acres in extent, provided with a commodious pavilion. It is situated within five minutes walk of the L. & S. W. Railway Station at Chiswick, and can be reached within forty minutes from the Hospital.

ST. THOMAS'S HOSPITAL MEDICAL AND PHYSICAL SOCIETY.

President.—J. L. Birley, C.B.E., M.A., M.D., B.Ch. Oxon.

Hon. Treasurer.—Prof. F. G. Parsons.

Hon. Secretaries.

Mr. C. L. C. Burns. Mr. M. H. Webb-Peploe.

This Society was founded in the early part of the last century by students of the Hospital, and has for its object the reading and discussion of papers on Medicine, Surgery, and subjects of general interest, the narration of cases, and the exhibition of specimens of Physiological and Pathological interest. The Meetings are held in the Students' Club on alternate Thursdays at 8.30 p.m., and terminate not later than 10 p.m.

Further information can be obtained of the Hon. Secretaries.

ST. THOMAS'S HOSPITAL GAZETTE.

The Gazette was founded in 1891, and is published 6 times during the year. It records the current events of the Hospital and School, including reports of the various sections of the Amalgamated Clubs, and of the proceedings of the Medical and Physical Society. Articles are contributed by Members of the Staff, and by past and present Students, dealing with new methods of treatment and technique, as seen in the practice of the Hospital and with medical work and life at home, abroad and in the Services. Photographs and illustrations are frequently inserted. In this way the Gazette endeavours to be a common interest to all Members, past and present, of the Medical School.

The Gazette is supplied without further payment to those who subscribe annually to the Amalgamated Clubs. Subsequently it may be obtained by an annual subscription of 7s. 6d, or by a Composition at the rate of £1 10s. for 5 years, or 5 guineas for life.

TERRACE VIEW.

University of Toronto
Library

DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET

Acme Library Card Pocket
Under Pat. "Ref. Index File"
Made by LIBRARY BUREAU